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ABSTRACT

This evaluation of an attempt by the Papua New Guinea Department of Education to establish Generalist Teaching (GT) in provincial secondary schools from 1973 to 1977 is based on survey and case study data. Generalist Teaching was introduced to schools by means of two department circulars proposing reorientation of grades 7 and 8 curricula from existing specialized subjects. In order to ease students' transition into high school and to cut personnel costs, generalist teachers were asked to teach at least three subjects to the same class, and schools were expected to develop their own integrated curriculum. Chapter 1 places GT in its historical and theoretical context and reviews research problems and methodology. Chapter 2 summarizes the results of a survey of headquarters administrators that generally indicated no prior planning or consideration of the implications of implementing GT. The third chapter reports on a survey of 96 teachers' characteristics and attitudes toward GT, finding that the predominantly young, inexperienced teachers for whom little assistance was provided experienced confusion about the aims of GT. Chapter 4 presents case studies based primarily on staff interviews in five schools. The final chapter summarizes the implications of the study, concluding that GT was an example of poorly planned and badly managed change and offering recommendations for effective implementation of proposed change. (MJL)

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GENERALIST TEACHING POLICY AND PRACTICE

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ERU RESEARCH REPORT NO. 36
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ABSTRACT

Generalist Teaching was current in provincial high schools in Papua New Guinea from 1975 to 1979. It attempted to initiate a move away from subject specialisation and towards subject integration. This was a radical change from past practice for it demanded school-based curriculum development. Teachers were required to plan, prepare and implement Generalist Teaching according to their assessment of the needs and capabilities of themselves, their pupils and the school.

This study analysed the history of Generalist Teaching from both policy and practice perspectives. Data were collected in three ways. First, policy was determined by means of a total interview survey of all former (1974-5) and then current (1977) headquarters personnel associated with Generalist Teaching. Relevant headquarters files were also examined. Second, the practice of Generalist Teaching was determined by means of a questionnaire survey of schools to which 96 teachers from 33 schools responded. Finally, following the questionnaire survey, in-depth case studies of five schools were conducted.

Results revealed that there were many contradictions between the policy and practice of Generalist Teaching. Generalist Teaching originated in the upper echelons of the Department of Education hierarchy and was quickly introduced to schools. In fact, Generalist Teaching was a classic example of a 'top-down' change. In itself, this is not to be condemned. Once in the schools, however, the change assumed the characteristics of a 'grass-roots' type model. Administrators directed that a change be introduced and then expected teachers to take the initiative for planning, organising, developing and practising the change. Teachers, however, were unable to cope with their new found freedom and responsibilities. Token gestures were made to fulfil the requirements directed by headquarters, but results indicated that the concept of Generalist Teaching was too sophisticated for the environment in which it was supposed to be implemented. Much of what purported to be change, therefore, was change in name only.

Generalist Teaching was an example of a poorly planned and badly managed change. Individuals and groups at every level of the PNG education system were inadequately prepared for Generalist Teaching, so its ultimate failure was not entirely unexpected. The gap between theory and reality, policy and practice was a very real one. Generalist Teaching has shown that successful change cannot be brought about by administrative fiat alone. In light of this, recommendations are made that proposed changes should be carefully analysed prior to their introduction; that the system should be geared to support the change; that individuals and groups affected by the change should be properly consulted; and that implementation methods should be appropriate to the change, the system and the people involved. Consideration of these recommendations should help to avoid repeating in the future the mistakes of the past.

E.R.U. RESEARCH REPORT No. 36

GENERALIST TEACHING POLICY AND PRACTICE

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Mr Roy Harvey from Goroka High School, and Messrs Richard Lornie, Malcolm Ross, Tony Wrightson and David Kuhlman of Goroka Teachers' College commented on initial questionnaires and other members of the Goroka Teachers' College staff distributed questionnaires to schools. Dr David Shields at Goroka Teachers' College wrote a computer programme which facilitated analysis of results. The Goroka Teachers' College Research Committee approved funds for travel, accommodation and computer analysis of results.

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FOREWORD

Until 1975 teaching was done in specialised subject areas by specialised subject area teachers in Papua New Guinea provincial high schools (PHS). In 1975 Department of Education introduced generalist teaching in the schools.

Generalist teaching was introduced mainly for lower grades of the secondary level, much more so for Grade 7 students. The main reasoning behind the policy of generalist teaching was to minimise the transitional learning and other difficulties faced by young students entering the PHS. The policy on generalist teaching in PHS was formalised in 1976 through Secondary Circular Letter 1/76.

The findings in this report state some favourable views about the initial years of the scheme. However, the critical examination of the years after the second or third year reveals that insufficient careful consideration given in policy making can become very costly and disadvantageous for the recipients.

The report contains, in the main, constructive criticism for decision making bodies in relation to cost effectiveness. The report, although very critical, is fair and it provides valuable information on assessment of policy making relative to difficulties of implementation by way of effective teaching and learning.

It should be appreciated that this critical analysis of generalist teaching was done for future improvement of education in the provincial high schools.

G. Ilagi
Assistant Secretary - Standards Division
Department of Education

Chapter One

CONTEXT OF THE STUDY

Generalist Teaching (GT) was an educational change introduced to provincial high schools in Papua New Guinea in 1975. When this study was conceived in 1977, GT had been in schools for almost two and a half years. The exact nature of GT, how it was introduced to schools and teachers' reactions to GT were uncertain. By 1977 it was apparent to teachers involved in GT, as well as to personnel at education headquarters, that GT was becoming the cause of much concern. This concern was based largely on hearsay rather than on factual evidence, for no rigorous evaluation of GT had apparently been undertaken either before, during or after its implementation. Consequently, as an educational change, GT required critical examination.

The aim of this study was to provide data with which teachers, divisions within the Department of Education, and teacher training institutions could plan and work. Clarification of GT and its implementation became the base from which the study identified and examined the rationale for and characteristics of GT in PNG secondary schools, how GT was perceived by administrators and teachers, and its resultant practice in schools. From the study, a list of recommendations concerning the future of GT in particular, and of other planned curriculum projects, in general, were made.

The study now reports on a historical event. GT no longer exists and the actions of the Department of Education which are reported upon cover the period 1973-1977. This was a difficult period for the Department as a whole, with the massive transfer of responsibilities occurring as a result of Self-Government and Independence. Within the Department, responsibilities for curriculum decision-making were also changing, and some of the problems of GT seem to have resulted from this. In presenting the report, it is not intended to imply that the problems analyzed are still current. The intention is to illustrate what did go wrong, and what lessons can be drawn for future use.

This report comprises three main chapters which outline the findings of the research. The next chapter examines the policy of GT as presented by headquarters documents and personnel. Chapter 3 presents the practice of GT as revealed by the questionnaire survey. Chapter 4 analyses the practice of GT in greater detail by providing the findings from the school case study research. The report concludes with an overall evaluation of GT and recommendations about future curricular changes. Readers interested in further details on the theoretical and methodological bases of the study are referred to the thesis from which this report is drawn (Field 1980).

1.1 Generalist Teaching

GT was introduced to schools by means of two circulars issued from Department of Education headquarters by former (1974) and current (1977) Assistant Secretaries (formerly called Assistant Directors) for Secondary Education. Schools were informed about GT initially through a Secondary Circular Letter distributed in July 1974 (Secondary Division 1974: Secondary Circular Letter No. 15/74 A15 M14. See Appendix A). Secondary Circular Letter 15/74 was concerned mainly with a potential reorientation of junior secondary school curricula proposed for 1975. The circular dealt with three points which were 'proposed as a start for possible curriculum changes' to begin at a later date. Point one suggested that schools experiment with 'generalist teacher programmes' in 1975. A teacher was to 'teach the same class for about 25 lessons a week'. The second point stressed the importance of community involvement and self-reliance. Finally, teachers were reminded of the desirability of developing a practical orientation to studies in the first two years of secondary school. 'Integration of subjects under a generalist teacher' was seen to be instrumental in achieving point three.

The second circular to schools did not appear until almost a year and a half after Secondary Circular Letter 15/74 was issued, and a year after GT had initially been put into schools. Secondary Circular Letter 1/76 (Secondary Division 1975: Secondary Circular Letter No.1/76 A1 M1. See Appendix B), which also mentioned Secondary Circular Letter 15/74, referred to the extent to which schools had implemented GT at that time, the form GT should take, and the role of Regional Secondary Inspectors in the programme. GT was to have been implemented in all schools in the first, and where possible the second year of secondary school by 1976, and was to take the following form:

> Generalist teaching should involve one teacher to teach at least three subjects, comprising approximately half the total Form 1 [Grade 7] period loading, to the one class.
>
> The subject combinations should be flexible and be decided by individual schools according to the availability of staff.
>
> Where possible, an experienced member of staff should be appointed to co-ordinate the Generalist teaching programme.
>
> Schools should attempt to develop their own integrated curriculum for forms [grades] with Generalist teaching.

GT was, therefore, conceived of in a curriculum context which also had organisational consequences.

Few schools seemed to follow either of these directives very closely. In practice, a variety of teaching ideas were incorporated under the title of 'Generalist Teaching'. This became apparent from two brief surveys of GT conducted in May and July of 1976 by Goroka Teachers' College (University of Papua New Guinea) and the Secondary Division (a division within the Department of Education), respectively. The Goroka Teachers' College survey (Goroka Teachers' College 1976) aimed first of all, to determine how schools were interpreting GT; secondly, to discover how Goroka graduates were coping with GT; and finally, to study the implications of the results for Goroka Teachers' College as a teacher training institute.

The Goroka Teachers' College survey revealed that graduates were often inexperienced, teaching subjects for which they were not trained, there was no common method for organising GT in schools, 'Generalist Teaching' was interpreted in different ways by teachers, teachers were not receiving adequate assistance from headquarters, GT had numerous advantages and disadvantages for both pupils and teachers, and that Goroka Teachers' College should play a more active role by providing advice about and assistance with GT to current trainees and teachers in the field.

The second report was based on the results of a questionnaire distributed to ten Regional Secondary Inspectors by Secondary Division (Secondary Divison 1976e). There were twelve parts to the questionnaire, covering a range of topics including school participation in GT, staffing, organisation of GT, the advantages and disadvantages of GT, assistance required by schools, assessment procedures, materials availability, the possiblity of a future GT curriculum being organised, and the ways in which national teachers were coping with GT. Results indicated a higher proportion of national to expatriate teachers involved in the programme, that a core subject approach was common with few schools using a thematic or integrated approach, and that GT was seen to have both advantages and disadvantages for pupils and teachers. Practical assistance to schools in the form of materials, programmes, syllabuses, teacher training, school co-ordinators for GT, and courses for teachers were considered urgent. The survey also found national teachers generally did not seem to have sufficiently adequate background knowledge or experience to adequately cope with GT.

The surveys indicated that few schools completely followed either Secondary Circular Letter 15/74 or Secondary Circular Letter 1/76. While the organisational requirements of GT were met, the development of integrated programmes were rare. Interpretations put on the concept of 'Generalist Teaching' by teachers appeared to differ from interpretations by administrators at education headquarters. No really comprehensive guidelines had been laid down by administrators, and while for some teachers this might have been a desirable situation, for many teachers this seemed to promote uncertainty.

Results from each of the surveys should be treated with caution, however, for three reasons. First of all, each survey was biased toward a certain group - the Goroka Teachers' College survey toward Goroka graduates and the Secondary Division survey toward Regional Secondary Inspectors - so results cannot be considered representative of the generalist teacher population or of the GT classroom. Secondly, the Goroka Teachers' College questionnaire design was faulty. For example question alternatives were far too limited in some cases, with no 'other' response categories provided to compensate for this limitation, and only the advantage of GT were asked for - disadvantages were ignored. While only minor errors in themselves, such problems may have contributed to a cumulative bias in results. Thirdly, the survey population for the Secondary Division survey comprised only ten individuals. Even though these individuals were inspectors who spent a lot of their time in schools observing GT in practice and talking with teachers, opinions of ten respondents cannot be considered indicative of wider opinion on GT. Therefore, care should be taken when dealing with results from each of the surveys. But, while each of the surveys displayed shortcomings, their findings still provided useful indications that the GT programme was experiencing problems in schools at that time.

The surveys showed the need for comprehensive and reliable information on GT and its practice in schools. In retrospect, it appears results from the two surveys (inadequate as they were) were not well known. Administrators claimed they were aware of teachers' attitudes to the programme, and teachers believed they knew departmental attitudes toward GT. Neither claim appeared to be based on sound research or consultation between the two groups - opinions appeared to be derived from professional gossip and casual observation rather than from the survey results. Thus there was an obvious need in 1977 to provide both groups with reliable data on the status of GT in PNG secondary schools.

1.2 Research Problems and Methodology

This investigation aimed to examine the development of GT from its inception in 1974-5 and its standing in schools at the end of 1977. GT, its policy and practice were investigated from both education headquarters personnel and teachers' perspectives. Data collection focused on the following questions:

1. What was GT?
2. What was the policy behind the introduction of GT?
3. What mechanisms and processes were used to put GT into practice in schools and why were they used?
4. How did schools and teachers cope with GT?
5. What were the attitudes of teachers and headquarters personnel toward GT and what were the reasons for these attitudes?
6. What were the reasons for the success and/or failure of GT?
7. How can lessons learned from GT assist in future curriculum changes in PNG?

To answer the research problems, data collection was organised around the policy and practice of GT. The policy behind GT was investigated by means of interviews with three former (1974-5) and ten current (1977) education headquarters personnel and an analysis of headquarters files relevant to GT. The practice of GT was determined by a questionnaire survey of 96 teachers in 33 schools which was followed up with case studies of five selected schools.

Because little detailed or reliable evidence was available about GT at the time of the study, the methodology selected needed to incorporate a variety of data collection techniques in order to provide a wide and comprehensive coverage of GT. The research design 'blueprint' for this study is illustrated below in Table 1.1. Details of the methodology can be found in Field (1980: 71-99, 249-69).

Table 1.1 Research Design

Problem	Sampling	Data Collection Techniques
Policy	Headquarters Staff - total	Interviewing
	Headquarters Documents - total	Documentary Analysis
Practice	Schools - random	Questionnaire
	School Case Studies - non-random	Interviewing, documentary analysis, lesson recording

Policy

To determine the policy of GT, there were three groups of officers to be interviewed: first, current headquarters personnel, second, former headquarters personnel and, third, Regional Secondary Inspectors. The specific personnel approached from each of these groups were as follows:

1. The Assistant Secretaries for Secondary Education, both past (1974 - then called Assistant Directors) and current (1977).
2. The Superintendents of Secondary Inspections, both past (1974) and current (1977).
3. Current Regional Secondary Inspectors (1977), of whom there were nine.
4. The Superintendent of the Staff Development Unit (1977).
5. The Superintendent and Acting Superintendent of the Curriculum Unit (1977) and the GT Curriculum Officer (1977).
6. The Assistant Secretary for the Planning Services Division (1977).

A response rate of 72% (13 out of 18 personnel) was achieved.

Access to files about GT in each of the relevant headquarters sections was also sought. However, these files ultimately played a minor role from the point of view of actual quantity of data relevant to GT which was collected from them. In most cases, the lack of information available from this source was interesting in itself, and thus indirectly shed light on Departmental approaches and attitudes toward GT.

Practice I

The first part of the analysis of the practice of GT was to acquire an understanding of the current state of GT in schools. To this end, a questionnaire survey of a pure random sample of the 81 provincial high schools was conducted between May and August 1977. The response rate to the questionnaire was very encouraging. 33 (82.5%) of the 40 sample schools returned questionnaires, with a total of 96 teachers completing the questionnaire.

Practice II

Case studies were included to counterbalance the generalised nature of the survey by presenting more detailed information. There were two bases for the selection of specific schools for inclusion as case studies. First, three schools were selected on the basis of the success or failure of GT, and second, a further three schools were chosen for the type of GT they were practising. Data from the questionnaire survey were used to select specific schools, but due to the pressures of time and finance, these schools were restricted to the Highlands region. One school was omitted at the headmaster's request because he felt too many research demands had recently been made on the school. This meant that five schools provided material for case studies. Two types of data were collected for school case studies. First, interviews were conducted with those school personnel involved with GT at that time, and second, relevant school files were examined. In all, 79% of staff associated with GT were interviewed. Co-operation by staff in all schools was generally very encouraging.

1.3 An Historical Perspective

The focus for this study is curriculum implementation rather than curriculum development, however, a brief review of the historical development of curricular in PNG will help place GT in its historical perspective

McKinnon (1976: 49) - a former Director of Education in PNG - in a paper first presented in 1971, postulated five stages of post-European curriculum development for developing countries. He considered these stages parallel to Beeby's (1966) four stages of quality of educational development. McKinnon's stages, in order of chronological development, are: first, imitative stage; second, derivative stage; third, venturesome local stage; fourth, modern local stage; and fifth, integrated modern local stage. The following description will follow McKinnon's stages, but use of them is not necessarily an endorsement of their validity (an exercise beyond the scope of this study). They merely provide a convenient framework in which to set GT as a curriculum change.

The Imitative Stage was readily apparent in PNG when various mission groups and colonial administrations transplanted curricula from their countries of origin - predominantly German curricula in New Guinea and Australian in Papua. Missions concentrated on building an extensive system of low-level primary education with the aim of bringing Christianity to the people (Essai 1961: 169; Colebatch 1968: 104; Smith 1975: 13; Thomas 1976: 4).

Stage two, the Derivative Stage, developed after World War II when alterations were made to foreign syllabuses (Thomas 1974: 127; McKinnon 1976: 49-50). For example, the Sarawak secondary science syllabus was adapted to meet certain 'local parameters' (Whelan 1974: 3) and the N.S.W. Syndham syllabuses were 'modified to suit the background of students' in PNG (Neve 1964: 2, 3).

The Venturesome Local Stage in the 1960s represented a major break with past stages when substantial changes were made to curricula in many subject areas to make them easier to teach and more relevant (Thomas 1974: 127; Smith 1975: 38). This stage was seen to reach its conclusion following the printing of syllabuses which became teachers' 'Bibles'. Here, 'teachers are trained to use it, and teaching materials are produced for it' (McKinnon 1976: 50).

Moves were made in the late 1960s toward developing specific syllabuses in a variety of subject areas. These moves heralded the Modern Local Stage where pre-Independence pressures to educate an elite met with an emphasis on academic syllabuses adapted to PNG conditions. The Secondary Social Science Syllabus was one example of a syllabus at this stage (Thomas 1974: 127). By the 1970s it was becoming apparent that the stage of development of curricula was incompatable with teachers' capabilities and training (Louisson 1974: 98).

McKinnon believed the Integrated Modern Local Stage (which he did not define) to be but a 'distant possibility'. Failure to reach the fifth stage was not a cause for concern, however, because 'few others have achieved that ideal, since major curriculum development in the Western world, in recent years, has continued to concentrate on curriculum development by subject areas' (Mckinnon 1976: 49).

Because GT seemed to be an attempt to move to the fifth stage of McKinnon's curriculum development stages, curriculum integration requires closer attention. The following analysis will focus on the nature of integrated curricula, the demands they make on human and material resources, and their effectiveness in practice.

1.4 Curriculum Integration

Curriculum content can be organised in a variety of ways - by subject, by correlation of content, in a broad fields style, as a core of subjects, or in an experience centred mode (Beckner and Cornett 1972: 432-44; Doll 1974: 109-11). Integration of subjects is common to most of these styles and 'it is generally recognised that some degree of incidental correlation is found in any curriculum but planned and systematic programs designed to achieve this purpose have been noticeably absent' (Beckner and Cornett 1972: 436).

Curriculum integration is an extremely complicated process. It is complicated in its concept, the way in which it affects teaching roles, time allocation, and school and classroom organisation, yet curriculum integration can also provide an opportunity for developing a 'rich and stimulating environment' (Pring 1971: 271, 272). The subject-oriented syllabus, on the other hand, has been accused of stifling inquiry by creating artificial barriers and by limiting study to a comparatively narrow range of areas of knowledge (Morris and Howson 1970: 9; Pring 1971: 266). It is also argued that such barriers are not present in the real world and an artificial view of reality is, therefore, presented to pupils. Kerr (1971: 190) considers it unfortunate that relatively little attention has been given to the interrelated nature of disciplines in curriculum development. For the most part, concentration has, and still is, largely focused on separate subject disciplines.

The concept of curriculum integration and its related organisational corollary of a self-contained classroom are not new, and they combine a variety of advantages and disadvantages (Ackerlund 1967: 199). The strengthening of pupil/teacher, pupil/pupil, and teacher/teacher relationships is perhaps the most obvious advantage. Bernstein (1971: 63) suggested integration can 'provide the conditions for strong horizontal relationships and allegiances ... based upon a common work task'. At another level, integration can also lead teachers into a 'new awareness of the relatedness of their subjects, and the need to build on such relatedness' (Ritchie 1968: 8). From an organisational point of view, teachers are provided with greater flexibility in time allocation for teaching and learning (Ackerlund 1967: 199).

The disadvantages of integrated curricula tend to centre on the teacher. Teachers might find they are expected to teach subjects they have little or no interest or aptitude in (Ackerlund 1967: 199). Teachers are required to spend longer hours with pupils than the more traditional teaching styles demand, teachers need to have a wide range of subject knowledge and related teaching skills, and they need to have a sound knowledge of curriculum principles. In New South Wales, for example, schools were given greater autonomy in developing integrated curricula suited to their own circumstances and needs (Secondary School Board 1975). However, the result of this was little change to existing curricular because many school principals and staff were 'not equipped with the necessary knowledge of curriculum development and theory to cope with the concepts of curriculum change that they are being confronted with' (B. Field 1978: 18). Similar situations have also been reported by Toomey (1977) in other parts of Australia, and Kerr (1971) in England. Despite the many advantages, however, Hawes et al (1979: 89, 91) argue that 'it may prove wiser to provide for alternative approaches within a system than to force patterns of integration on insecure and bewildered teachers'.

McKinnon (1976: 54-5), however, warned against integration of curricula in developing countries for a number of reasons. While he was referring specifically to primary curriculum development, his warning is apt for similar developments at the secondary level. The problems include: lack of people with sufficient expertise in developing integrated curricula; insufficient finance for purchasing materials and apparatus; length of time considered essential for developing such a curriculum; excessive expense and time required to provide and train supervisors; and the difficulties of preparing teachers for change. McKinnon (1976: 55) argued:

> the curriculum is only integrated if a teacher is able to flexibly manage teaching of the different points as opportunity offers. Considerable insight

into the nature of the growth and learning process is necessary. Likewise, considerable general education and a thorough training are necessary for teachers. Where these features are not present or even where there is doubt, it is likely that piecemeal development, subject by subject, provides the best strategy.

1.5 Conclusion

The experience of western countries has suggested that for curriculum integration to be successful in the classroom, teachers need to be well educated and highly trained. Curriculum integration suggests that teachers need to believe that subject integration is better than subject specialisation. Curriculum integration and school-based curriculum development also imply a well developed and, ideally, decentralised system of education with an efficient communications system. According to the discussion by Hanf et al (1975) and McKinnon (1976), it is unlikely that such a style of curriculum development will prove to be successful in developing countries, because the influence of historical factors, existing educational structures and human and material resources are not congruent with the philosophy behind curriculum integration.

Chapter Two

POLICY: HEADQUARTERS SURVEY

This chapter is specifically concerned with policy aspects of GT as presented by headquarters-based documents and personnel. Analysis of documents making reference to GT will be presented in three parts: first, departmental correspondence; second, Curriculum Unit publications; and third, Regional Secondary Inspector's Newsletters and conference proceedings. Presentation of data is in chronological order in an attempt to determine how GT was developed, planned and implemented in schools. Following an analysis of the material from this file, data obtained by interviewing former and current headquarters administrative personnel and inspectors will be presented on the definition, development, introduction and implementation of GT in provincial high schools. Data presented here provide a basis for comparing the practice of GT in schools as described by administrators and teachers. Headquarters-based documents relevant to GT will now be considered.

2.1 Policy Development and Support

The development of a written policy as well as personnel and materials support for GT is the subject of the first part of this chapter. Data from written records are presented in chronological order to assist understanding of how GT evolved between 1975 and 1977.

Departmental Correspondence

For the purpose of this study, departmental correspondence refers mainly to Secondary Circular Letters which were distributed to schools by Secondary Division, and correspondence of various sorts between sections within education headquarters. The content of the first two Secondary Circular Letters on GT was discussed in Chapter 1.1, however a brief summary of the important points outlined in these documents needs to be detailed here.

Secondary Circular Letter 15/74 suggested that GT programmes be experimented with, and that one teacher would teach the same class for 'about 25 lessons a week'. The then Assistant Secretary for Secondary Education outlined a number of advantages inherent in such a programme, including personal advantages for pupils, professional advantages for teachers, more convenient classroom organisation and administration, and possible economic advantages. GT was not to be implemented as an isolated innovation, but was one of three suggested points for future curriculum reorientation. Community involvement and developing self-reliance in schools were stressed along with developing a practical Stage 1 (grades 7 and 8) course. The key to achieving these latter points was to be through GT and the integration of subjects. At this stage, GT was no more than a proposal and schools were invited to experiment with the idea.

The next official notice to schools about GT came a year and a half later, at the end of 1975, in Secondary Circular Letter 1/76 put out by the new Assistant Secretary for Secondary Education. This circular noted that during 1975 the majority of schools had successfully implemented GT. It recommended that GT be implemented in all schools in Form 1 (grade 7) in 1976 and where possible in Form 2 (grade 8). The organisational and classroom approaches suggested in the earlier Secondary Circular Letter were expanded on. Schools were given the freedom to follow up these guidelines in ways suited to their needs and availability of staff. It was suggested that an experienced member of staff co-ordinate the programme and that schools consult with Regional Secondary Inspectors for advice about timetabling GT and for obtaining information on various approaches other schools had utilised in their programmes.

By 1977, GT was compulsory for all schools unless special exemption had been sought. However, there was little documentary evidence available to explain the jump between Secondary Circular Letter 15/74 (where GT was a proposal) to Secondary Circular Letter 1/76, issued almost one and a half years later, where GT was policy.

No moves seemed to have been made toward providing specific direction to schools, and schools were encouraged to formulate their own aims, and to plan and implement GT according to their needs and the capabilities of staff.

The possibility of employing primary trained teachers in secondary schools, suggested in 1976 (Secondary Division 1976a), meant that primary teachers' skills and experience in teaching one class for a number of subjects could be usefully employed in the GT programme, but it is interesting to note that GT had been in schools for a year and a half before thought was given to providing such support to high schools. Support to schools for GT soon became an issue of concern, and in mid-1976 four priority areas were suggested in a minute to the Superintendent of Curriculum from the Superintendent of Inspections (Secondary Division 1976d):

> (i) The identification, collation, production and distribution of teaching materials to schools suitable for the Stage 1 Curriculum.
>
> (ii) Thermatic [sic] /Project Programmes accompanied by teaching aids, eg. Primary Social Science booklet or projects.
>
> (iii) The development of an integrated curriculum for Stage 1 - long term project.
>
> (iv) Assessment requirements and suggestions.
>
> The secondment of groups (3-4) of practising teachers to develop programmes or specific projects. This will be made under the control of the CDO, (Generalist Teaching). Suggest first group in September/October.

> A better co-ordinated and united approach by all Departmental Officers. Unfortunately there are a number of Inspectors, Curriculum Staff and teachers who are not convinced of the validity or otherwise of the programme. It is essential that all Headquarters staff support the programme irrespective of their personal convictions and are seen and heard doing so by school staff.

The last paragraph of this quotation suggests that conflict was developing between certain sections within education headquarters and between schools and the Department of Education about the merit of GT. Differences of opinion become more apparent in headquarters minutes as the year progressed.

A document issued by the Assistant Secretary for Secondary Education in July 1976 (Secondary Division 1976b) in response to a minute about GT from the Secretary (possibly for Secondary Education), dated June 29, 1976, apparently made lengthy queries about GT. The Secretary made certain recommendations for the future progress of GT and the minute issued by the Assistant Secretary for Secondary Education was attempting to answer these queries. The Assisant Secretary's original minute, however, was not able to be traced.

The Assistant Secretary's reply came under topic groups on the definition of GT, training of teachers for GT, approaches for GT, and the appointment of a Curriculum Officer for GT. The first response related to the 'approval' of GT, where the Secretary must have been querying whether GT had been properly approved prior to its implementation in schools. The Assistant Secretary's response stated that 'this is the set up that the Secondary and Education Services Divisions understand as Generalist Teaching which has been approved by you. Your comments "Approved", on the recommendation of the previous Minute of the Board, meant to the two divisions that you approved the whole package of recommendation on Item Two [previous minute], all 4 parts included'. Second, the original minute must have criticised the definition of GT for its broad scope, because this minute attempts to justify the nature of the definition by maintaining the definition 'was designed to be broad enough to allow high schools to trial this form of teaching without too much difficulty'. The nature of the query to which item three replied was not clear, however the reply outlined the

> great need in the short term for teachers, particularly those who are not trained in some of the subjects they are teaching to be given guidance on how to use available materials in a generalist teaching approach. In the longer term, particularly with the planned appointment of ex-primary teachers to the lower grades in Secondary Schools, there is a need for the development of a more fully integrated curriculum without the present subject barriers. Most teachers especially the new Goroka graduates, have shown that they cannot do either of the above without guidance that is not readily available to them at present.

The reason for the reply to item four was also unclear. Item five attempted to justify the appointment of a GT Curriculum Officer which the original minute may have stated was unnecessary. The suggestion that a reorganisation of existing staff within the Curriculum Unit was all that was required was argued against by the Assistant Secretary. Problems in the field were becoming increasingly apparent to headquarters personnel which the Assistant Secretary attributed to 'not enough teaching materials being made available for field teachers'.

The conflict between sections of the Department of Education and the extent of confusion about the nature of GT was heightened in the latter part of 1976. Correspondence between the Assistant Secretary for Education Services (Education Services 1976), the Acting Superintendent of the Curriculum Unit (Curriculum Unit 1976b) and the Superintendent of Inspections (Secondary Division 1976c) described this confusion. The correspondence began with a minute from the Assistant Secretary for Education Services, who expressed concern about two areas. First was concern 'about how the Generalist Teaching approach is developing and about the different kind [sic] of interpretation of this concept'. He suggested that 'perhaps it is about time we should really get down to sort out things'. The second area of concern was about

> the conflicting views expressed by Departmental officers and teachers. While General Teaching approach [sic] is now an accepted Departmental policy for Grade 7 classes in Provincial High Schools, at the same time some Departmental officers express grave reservations about the success of the approach. This conflict of views on the Generalist Teaching Approach by Departmental Officers, the very officers field staff will turn to for advice and guidance on policy directions, is a serious matter and quite often detrimental to the interest or endeavours of the Department in policy direction.

Because of these problems, the Assistant Secretary for Education Services requested that a detailed study be conducted on GT to ascertain teachers' and headquarters personnel views on the matter. The potential of GT for solving staffing shortages in provincial high schools was noted, as was the potential for GT to evolve into something more Papua New Guinean as distinct from the specialist subject system inherited from western nations. Concern was expressed that because of misunderstandings and undesirable attitudes amongst staff, this potential might not be realised.

In reply, the Acting Superintendent of Curriculum reiterated points made in the Goroka Teachers' College report on GT, described in Chapter 1.1 (Goroka Teachers' College 1976), stating that a further survey of GT was not considered necessary. The key points made in this minute are worth quoting at length:

> There are not curriculum staff directly connected with generalist teaching. They are all fully committed to other projects.

> Both the Curriculum Unit and Secondary Division have already stated quite clearly that, unless the Department is prepared, in terms of money and manpower to give proper support to the development of a generalist curriculum then the idea should be abandoned. There is no point in trying to introduce what is, for any teacher, a very sophisticated approach to teaching existing separate syllabuses without strong guidance and support. The only schools which have a generalist program that is working well are those with an experienced expatriate staff to allocate to it. Such schools will soon cease to exist.
>
> It is not possible to create an educationally worthwhile program by giving it a label and instructing all schools to carry it out. I would suggest that, unless and until adequate support can be given to generalist teaching, it should be optional for all schools.

Thus, the Curriculum Unit view was that adequate guidance for teachers in the form of curriculum materials had not and could not be provided because of insufficient finance and manpower.

Replying to this minute, the Superintendent of Inspections also agreed that further research into GT was not required. However, strong criticisms were levelled at the lack of 'personnel or backing from a number of quarters'. Materials for teachers and the development of GT programmes were considered to be important priorities. This minute was especially critical of the role of the Curriculum Unit in contributing to the problems facing schools:

> The question must be asked of the Curriculum Unit exactly what assistance it has given to the schools as far as Generalist Teaching is concerned over the past 20 months. The answer is virtually none. All developmental work has been the responsibility of individual schools and for a booklet [Bulletin No. 1, 'Generalist Teaching', Curriculum Unit, 1976a] on various approaches written and supervised by Secondary Division, but sent out under Curriculum Units name ... It is to the schools credit only that they have produced satisfactory results.

Clearly, GT was becoming a matter for concern. Some members within certain sections of the Department of Education seemed to be of the opinion that the requirements and demands made by GT could be met through internal reorganisation of existing structures and more efficient management. Others, however, argued fairly strongly for the need to appoint specialist personnel to overcome problems teachers were beginning to face, and problems which were beginning to worry personnel at education headquarters. Criticisms were being levelled at different sections within education headquarters for not providing the types of support other sections thought they should be providing. The result was a conflict, particularly between Secondary Division and the Curriculum Unit, which was becoming more noticeable and open.

Curriculum Unit Publications

GT had been in schools for a year before any materials had been produced by the Curriculum Unit for schools. A Curriculum Unit Bulletin issued in 1976 on Generalist Teaching (Curriculum Unit 1976a) aimed to 'provide schools with some concrete, helpful suggestions for an effective approach to GT', although as was pointed out above, the Superintendent of Inspections claimed credit should go to Secondary Division rather than the Curriculum Unit for writing that Bulletin. A short article was also published in the PNG Education Gazette (Barnsley 1976: 35-7) on the advantages and ways of organising GT in schools, but again, the article was promoting the idea rather than giving specific assistance.

During June and July 1976, two discussion papers on 'Materials Needed to Support Generalist Teaching' were issued by the Superintendent of Curriculum (Donohoe 1976a, 1976b). These were in response to papers, apparently written by Curriculum Unit personnel, 'requesting a clearer statement' of the types of materials the 'Curriculum Unit could produce to support generalist teaching in the secondary schools. The Superintendent commented that 'the first discussion paper was an "academic" one. The second paper discuss [sic] problems with generalist teaching from the teacher's viewpoint'. After defining 'Generalist Teaching', 'Correlation' and 'Integrated Curriculum' the first paper moved on to a brief discussion of ways in which schools could approach GT. The second paper, issued early in July 1976, was addressed more to teachers, and concentrated on what was happening in schools at that time.

Both discussion papers invited teachers to 'provide the Curriculum Unit with ideas on how to improve syllabuses and student materials to help generalist teachers'. Thought was being given to developing 'a clear and concrete set of criteria by which to plan syllabus writing and reviews' in light of the changing context of education and its needs in PNG, and also to changes in the type of teacher employed in schools. The reason given for introducing GT in this paper was to 'ensure by pre-service training and inservice [sic] training ... that all teachers can handle some extra subjects when necessary'. The body of Discussion Paper No.2 dealt mainly with general criticisms relating to inadequacies in existing specialist syllabuses rather than provided specific comment on GT. The paper avoided the curriculum implications of GT, for it focused on the existing problems facing pupils in grade 7, the possible reasons for these problems and on suggestions of ways for improving teaching and learning in schools at this level. The final paragraph, however, contained a brief reference to correlation/integration:

> Our syllabuses should be integrated already. However they are obviously not perfectly integrated e.g. Maths required in Social Science is at higher level [sic] than Maths being taught to students. If by correlation we mean putting

> knowledge together to make use of it, then the self-reliance activities, Practical Skills subjects, and the teaching of vocational skills during Stage 1 are a good way to correlate school learning.

Following the distribution of Discussion Paper No.2, the General Studies section within the Curriculum Unit presented a lengthy reply (General Studies Section 1976). According to the reply, Discussion Paper No. 2 'led to a good deal of misunderstanding both in the Curriculum Unit and amongst teachers ... Some teachers regard the paper as insulting'. For the most part, criticisms were levelled at the 'gross generalistions', 'simplistic explanations'. 'lack of balance' in comments made, 'tactlessness' of statements, lack of supporting 'research evidence' for assertions, the amount of 'negative' rather than positive comment, and the offending nature of 'extreme statements'. Very little of Discussion Paper No. 2 was not attacked, making apparent that there was conflict within the Curriculum Unit as well as between Curriculum Unit, Secondary Division and Education Services.

1977 saw the appointment of a GT Curriculum Officer (who was seconded from a provincial high school for a one year period only), and the Curriculum Unit was now able to give more attention to GT. By June 1977, the first of a series of GT Newsletters (Curriculum Unit 1977a, 1977b, 1977c) for teachers was produced, which tried to give teachers some practical guidance and support, although this Newsletter was, in fact, produced two and a half years after GT had been first implemented in provincial high schools. During 1977 a Generalist Syllabus Advisory Committee (consisting of the GT Curriculum Officer, teachers, and representatives from Goroka Teachers' College) was also set up in an attempt to aid the GT Curriculum Officer in Planning and organising the production of materials for teachers. The first meeting of the Committee, held in August of that year, spent a considerable amount of time attempting to clarify and define what GT was and what it was aiming to do, outlining possible approaches teachers could use, and preparing guidelines for Headmasters to follow in organising GT (Generalist Teaching Advisory Committee 1977).

There were few Curriculum Unit publications or materials provided to support teachers involved in the GT programme. In fact, any support that was provided did not begin until 1977 when it was very obvious that GT was a problem area for teachers in schools.

Inspectors Newsletters and Conference Proceedings

Regional Secondary Inspectors are not located at education headquarters, but they do provide the link between headquarters and schools. One of the inspectors' main functions is to ensure that headquarters policy is correctly implemented and practised in schools, therefore it is important that their comments be included here.

Because of the growing conflicts at education headquarters, and the limited assistance the Curriculum Unit was able to provide to schools, the most immediate support to schools was from Regional Secondary Inspectors Newsletters (in Regional Secondary Inspector's Reports 1977a, 1977b, 1977c) and discussions about GT at Secondary Ratings Conference (Secondary Division 1976f). Ratings Conferences pointed out the variety of approaches to GT used by teachers and expressed concern about the variable nature of success achieved by the programme as a whole:

> Secondary Division and the Regional Secondary Inspectors express deep concern regarding the support and assistance received by High Schools in regard to the Generalist teaching programme in Grade 7. The Department of Education is urgently requested to provide assistance in the two main identified areas i.e. teaching materials and the provision of a Generalist Curriculum Officer. Unless some tangible and material help is forthcoming the Generalist teaching programme in schools will in all probability fail to achieve the aim both Professionally and Administratively (Secondary Division 1976f. Emphases in original).

Problems facing teachers were noted and suggestions for overcoming these problems were also made in general terms, thus leaving the final decisions about the form GT was to take to inspectors and individual schools.

Contact with schools by Regional Secondary Inspectors was through personal visits and correspondence. General correspondence (Generalist Teaching 1977) attempted to provide information to teachers on how other schools were coping with GT, what individual schools were doing, and put forward suggestions for improving the existing organisation of GT in schools. Direct comments to schools were mainly positive, and provided the support schools and teachers seemed to need. More critical comments on problem areas and weaknesses in certain school programmes were sent to headquarters on a confidential basis for consideration and advice on how to act.

Summary

At this stage, it is appropriate to briefly evaluate some of the key points highlighted by the preceding discussion on policy development and support. Conclusions are drawn from available sources.

Documentary evidence was very limited in its availability on the policy development of GT. Apart from Secondary Circular Letters 15/74 and 1/76 little reference was made to what GT was and what the aims of the programme were. Such a paucity of data could mean a number of situations: first, that any written material on GT may have been subsumed by other files; second, that files relating to GT were missing; and/or third, that such documents did not exist in the first place because verbal communication played an important role in the policy development of GT. Obviously, gaps appeared in file materials, but why there were gaps it is not clear. This is particularly noticeable when minutes from one section refer to departmental minutes issued by other sections about GT. However, for some unexplained reason, different headquarters personnel maintained that files on GT did not exist.

It is difficult to explain why it took the Curriculum Unit so long to produce any materials for GT, and furthermore, when they were produced, why some of them, in this writer's opinion, were of such poor quality. Little thought had apparently been given to GT in the year and a half it had been in schools. The publications were obviously rushed and put out to counter increasing criticisms of GT and because of pressure from other sections of the Department of Education. So, perhaps the criticisms by Secondary Division of the Curriculum Unit had been justified.

For teachers with initiative and the appropriate experience, the Curriculum materials which were issued would have been most stimulating, providing a variety of ideas teachers could experiment with. For teachers who were not well trained and who had only limited experience, however, these materials would have been little more than confusing - the Curriculum Unit materials put forward numerous ideas, but provided little in the way of concrete step by step suggestions on how to go beyond the ideas to give them practical expression in the classroom. Similarly, because of the long delay in setting up the Generalist Syllabus Advisory Committee, much of the Committee's potential impact was lost. This Committee could have taken on an important and useful role had it been formed two and half years previously.

The written records that were available revealed conflict within and between sections of the Department of Education, lack of adequate support for teachers and general confusion about GT. Most documents tended to argue about what GT was, why it was introduced to schools, the approaches used by teachers and what should be done to rectify an increasing number of problems. Teachers were unable to cope with the requirements of GT according to written comment, and headquarters personnel were unable to assist. There was disagreement at headquarters over various aspects of GT and sections within the Department of Education implied that other sections were to blame for the apparently increasing confusion in schools. Confusion seemed to be the order of the day. One year the idea of practising GT was suggested, the next it was policy and schools were expected to implement it. What then, did headquarters personnel have to say about these matters?

The rest of this chapter presents opinions held by headquarters personnel on the definition, development, introduction and implementation of GT in provincial high schools. The data provide a synthesis of the views held by five divisional groups within the Department of Education (the Assistant Secretaries for Secondary, Secondary Division personnel, Regional Secondary Inspectors, the Curriculum Unit and the Planning Services Division). Data will be presented under six topic headings: first, definitions of GT; second, the aims of GT; third, origins, policy and implementation of GT; fourth, reactions to GT; fifth, the chances for success of GT; and finally, the future of GT.

2.2 Definitions of GT

Two main approaches to defining GT were offered by the former (1974) and the current (1977) personnel in each of the five divisions of the Department of Education being considered. GT was defined in administrative and organisational terms by the majority of respondents. The tenor of most of these definitions has been captured by the former Assistant Secretary for Secondary who commented that GT was where

> as many lessons as possible [were] taken with one class by one teacher, [and] that ideally these lessons would amount to approximately one half of the weekly lessons of the class and would include both academic and practical subjects ... With the introduction of the two-two system of secondary education, stage 1 (Forms 1 and 2) was designed so that almost half of the school week was spent on 'traditional, academic' subjects and the other half on practical, community oriented activities. It was proposed that where possible the same teacher take a class for about half of its lessons and that these lessons span both academic and practical activities to provide a link between the two (AS.1).*

GT was thought to be largely 'an organisational and operational issue ... so in that sense it's not a curriculum issue' (CU.2).

The second definition of GT proposed by two respondents was the suggestion that GT might go further than organisational considerations to include reference to classroom approaches used by teachers. The former Assistant Secretary emphasised the 'linkages' which were possible to develop between subjects. Essentially, therefore, there is a conflict between GT as an organisational change and GT as a curriculum innovation.

Consensus of opinion about the first definition in particular, was apparent - superficially at least - however, none of the respondents was able to give the term 'Generalist Teaching' a precise or exact curriculum meaning. Its organisational properties could be described. The style of classroom approach teachers might use could be described. Yet 'Generalist Teaching' remained unexplained in interviews as a curriculum innovation. So consensus of opinion existed not so much about what GT was, but rather on how GT was supposed to be practised in schools. The headquarters consensus was that GT could be described (rather than be defined) as a method for organising the junior secondary school, which could also have implications for the curriculum. This is, in fact, very close to the description provided in Secondary Circular Letter 15/74.

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* The following abbreviations will be used to cite comments made by headquarters personnel:

AS.1 and AS.2 - former and current Assistant Secretaries, Secondary.
SD.1 and SD.2 - former and current Superintendents, Secondary Inspections.
RSI.1 to RSI.5 - Regional Secondary Inspectors for 1977.
CU.1, CU.2 and CU.3 - Superintendent and Acting Superintendent of Curriculum and the GT Curriculum Officer.
PSD.1 - Assistant Secretary, Planning Services Division for 1977.

2.3 Aims of GT

Of the headquarters personnel interviewed, only one person was able to provide a definite list of aims for GT which apparently preceded the introduction of GT into schools:

(i) to assist pupils in the transition from primary to secondary and from day to boarding school;

(ii) to provide pupils with a teacher whom they could get to know and from whom they could obtain advice and assistance readily;

(iii) to encourage integration among various subjects of the curriculum and to reduce specialist subject emphasis;

(iv) to emphasise that the teacher's function is dealing with children more than with content (AS.1).

It is worth noting that such specific detail about the aims was provided by the former rather than the current Assistant Secretary, and that the former Assistant Secretary claimed little direct involvement in GT because he left PNG before GT had been introduced to schools. These four aims were not written or considered definite, and were open to change 'subject to experience [of staff] in the interested schools' (AS.1).

The majority of respondents were rather vague about the existence of any stated aims for GT, with the implication being there were none. In fact, the former Superintendent of Inspections said that certainly in 1974 there were no aims or objectives for GT. One inspector even commented that 'since GT is merely an approach it does not or need not affect the general aims of the Secondary Curriculum (RSI.3). Any aims that were formulated seemed to be aims formulated when the innovation was first proposed. An emphasis on pupil-centred aims was also quite marked amongst respondents who had seen desirable aims for GT emerge from the personal and social advantages the programme seemed to have for pupils.

As a group, the inspectorate provided the greatest variety of aims for GT. This could be attributed to their close liaison with teachers in schools, compared with the relatively small direct contact with schools that headquarters personnel had. The essence of the pupil-centred aims mentioned by many respondents was summarised by one inspector who thought GT aimed

> to play an intermediate role enabling the grade six students entering high schools to slowly adjust to the new social environment [by] having the same room and ... teacher three-quarters of the school time [and] providing a sense of security with the one teacher (RSI.1).

Associated with this pastoral care aspect of GT, pupils were seen to derive additional benefits through subject integration, the opportunity for practical lessons and also through consolidating academic skills.

Organisational aims for GT were not entirely neglected by inspectors either, who maintained that GT also aimed at more economical use of staff and at providing greater lesson flexibility for teachers who were no longer constrained by the usual timetable and time limits of specialist subject teaching.

The aims mentioned by inspectors (which seemed to have been derived from field observation) were in contrast to the vague responses of education headquarters personnel, implying that no specific aims were formulated for GT prior to its implementation. Aims apparently derived-after the implementation of GT - from the practice of GT in schools, with such aims emphasising the benefits this programme had for pupils.

2.4 Origins, Policy and Implementation of GT

The origins, policy and implementation of GT have been included in the one section because of the complex nature of their relationship. For the sake of simplicity they have been dealt with in separate parts, but it should be remembered that each of these factors are closely related to each other.

The Origins of GT

The exact year GT originated was uncertain, although all respondents agreed that the concept was first introduced for consideration in the early 1970s, possibly around 1972-3. There was general agreement amongst respondents that GT was introduced to schools at the beginning of 1975, but there was considerable confusion about who or where the idea came from. Many respondents had a 'vague feeling' that it was somehow associated with Secondary Division, and more specifically with the former Assistant Secretary for Secondary (SD.1, SD.2, CU.1). The Assistant Secretary of the Planning Services Division suggested that GT may have originated within 'Secondary Division, possibly in consultation with the Curriculum Unit'. The Curriculum Unit, however, denied any association with Secondary Division over GT (CU.2). The former Assistant Secretary commented, however, that the concept of GT was initiated by officers within Secondary Division, although 'I was probably mainly responsible'. This statement would also explain the precision with which the former Assistant Secretary was able to define aims for GT, presented in Chapter 2.3.

The reason why a decision was made to introduce GT was not so clear cut, and was also a matter for contention amongst different sections and personnel at education headquarters. No discussion on GT in these early stages had apparently been committed to paper - whatever was argued or thought was 'just general gossip' (AS.2). GT was initially a 'minor innovation to be treated as an experiment to see if it would work' and, therefore, 'there was not formal policy' at that time (SD.1). Moreover, the previous Assistant Secretary 'would have hated to have seen it forced on schools without more assistance given to local teachers' (SD.1). GT was supposedly thought of merely as an experiment to test its feasibility and effectiveness in a PNG school situation (AS.1, SD.1 and RSI.2).

Associated with the introduction of GT was apparently a concern about the nature of secondary education developing in PNG at that time. Education in the mid-1970s was seen to embody 'very elitist teaching and standards compared with other developing countries', therefore, a programme like GT was thought to be able to bring 'secondary education to a level which was more applicable to this country for the future' (SD.2). Furthermore, fewer expatriate officers were to be employed as secondary teachers in future years, and the current supply, qualifications and experience of teachers had to be more efficiently utilised (SD.2).

Schools were encouraged to experiment with GT in its various forms to assist the department with formulating ideas, as well as developing a familiarity with potential strong and weak points in the programme. Following this experimental phase, the assumption of the former Assistant Secretary was that a properly organised implementation programme would have ensued, assuming that GT was seen to have potential (AS.1). Curriculum personnel, however, were not so affable about the introduction of GT. The Acting Superintendent of Curriculum, for example, maintained GT was introduced for 'no sound reasons' despite the fact that later justifications for its introduction were presented, and he even suggested that the introduction of GT was no less than the 'last act of bastardry' by one individual at education headquarters before leaving PNG.

The original reasons for GT being introduced to schools were thus confused. Personnel employed in the early 1970s remembered GT as no more than an experiment:

> It was essentially the interest of one man. Partly to do with the staffing problem ... there was for a year, an alternative by which a headmaster would arrange Grade 7 ... The seven period day and the generalist teaching scheme were two suggestions to overcome the staff problem and also to introduce a teaching programme which would have value in the schools (RSI.4).

However, personnel who were later involved with GT were able to outline reasons to justify its introduction. But again, such reasons seem to have been rationalisations inferred from the practice of GT observed in schools, and through discussions with school staff, rather than having been based on documentary evidence. Other possible reasons suggested for its introduction included: to ease staffing allocation problems being experienced at that time (PSD.1, RSI.4); as an educationally sound alternative to specialist teaching (RSI.2); to ease pupils' transition from primary to secondary schools (PSD.1, CU.2); for organisational reasons (CU.1, CU.2); to reduce pressures associated with specialist subject postings (PSD.1); and to facilitate subject integration (PSD.1). Some of these agree with the former Assistant Secretary's perceptions, but seem more to have been based on the advantages offered by GT mainly in an organisational context. However, the implication of these comments was that no one was really very certain why GT had been introduced to schools in 1975.

Policy

Respondents were not able to provide a coherent description or reference to departmental policy concerning GT. The GT Curriculum Officer, for example, was unable to find any written policy statements about GT on taking up her position in the Curriculum Unit. 'If there was [a] policy it should [have been] defined. I would have found it. But there was no file' (CU.3). The idea of GT seemed to have been deliberately left open, thus placing the initiative on schools to develop their own policy for GT (SD.2, AS.2).

The only statements which personnel considered equivalent to a policy statement were Secondary Circular Letters 15/74 and 1/76. Policy had not really altered since 1975, said one inspector, because no true policy statement had existed in the first place (RSI.5). There was 'no departmental policy in terms of straight, strict guidelines. There was a general guideline on how they [schools] should approach it and it was then thrown into schools' (AS.2) for teachers to find an appropriate way for organising and implementing GT. Despite pleas for some sort of written policy, this had been refused by the current Assistant Secretary for Secondary, because he felt that by committing policy decisions to writing, the flexibility of the GT approach would be restricted. GT was to remain 'an open thing for the teachers to manoeuvre' (AS.2) with final decisions resting with schools and the human and material resources available for their use (AS.1, AS.2). This approach was considered 'much more professional than producing a book and saying, "Right, that's it. That's the rule and you teach according to the gospel"' (AS.2).

The Assistant Secretary of the Planning Services Division was also unaware of the existence of any initial or later policy statements about GT. However he understood GT to have an administrative role - 'inferred from behaviour rather than a matter of stated policy':

> It seems that Secondary Division decided to introduce GT, that it convinced the Secretary of the need for it, that it prepared Gazette articles on GT, to which ... the Policy and Planning Division objected, but that these Gazette articles were published on the authority of the Secretary and the Division went ahead with the implementation of GT ... It seems to me that a policy which is demanding superior performance of a body of teachers, which is overall declining in abilities, is a policy which incorporates the seeds of its own failure (PSD.1).

When asked if the general lack of background information about GT was considered part of the policy on GT , the current Superintendent of Inspections replied: 'it wasn't deliberate policy at all ... There were so many factors you had to take into account which were unknown at headquarters level' (SD.2). The vagueness of guidelines was supposedly intentional because, among other things, 'so much depended upon the interests and talents of individual teachers' (AS.1).

The vagueness surrounding possible policy on GT was thus rationalised by headquarters personnel as being desirable in many ways because its flexible nature depended on the quantity and quality of human and material resources available for schools to draw upon. Such an approach implied that schools and teachers were not being forced into a situation they might not have been able to cope with - they had the freedom to develop GT in any way they chose. Such an approach, however, also assumed a highly competent and experienced staff able to cope with limited direction.

Directives

There appeared to be only one original directive issued to schools (Secondary Circular Letter 1/76) which was enforced by the inspectors. The inspectors' immediate supervisor said:

> We put out a circular which was a very general guideline of what it was, and the advantages of it - as seen without any trials or thought. And it was then really up to the Inspectors at their own levels to either sell it or not to sell it. They had - officially - no option not to sell it (SD.2).

This Secondary Circular Letter was seen by the current Superintent of Inspections to be 'pretty flexible' and as long as schools conformed to the 'fifteen to twenty' period minimum teaching requirement, the department was satisfied.

Three inspectors thought there had been sufficient direction to schools about GT. Two inspectors would have preferred additional guidance, because 'more limiting and specific directives would remove some confusion' (RSI.2). One inspector commented:

> Departmental directives were not written especially to win over the teachers. The writers could have presented themselves as being more convinced of the worth of the programme in the light of known experience, and on professional performance. Unless a teacher can be convinced of the generalist programme's worth and he has the incentive to increase his range of subjects, unless he has the ambition to try and work himself into subjects which he has not taught before, it will not be the success that headquarters would like (RSI.4).

Participation

When GT was first conceived, apparently discussions about the programme were conducted with Secondary Division, at Inspectors' Conferences and at departmental meetings. These discussions culminated in some headmasters agreeing in 1974 to introduce GT on a trial basis at their schools to test its effectiveness. This was only on a small scale "enthusiast" base in 1974' (AS.1). Very little was apparently written about GT or committed to paper - much of which occurred was 'just general gossip' (AS.2).

Consultation between groups likely to have an interest in or be affected by GT within the Department of Education appeared to have been limited. Similarly, consultation between divisions within the department and with school personnel most likely to be affected by the change, were minimal. The most extreme example of a communications breakdown was that the Planning Services Division first became aware of GT in 1976. By 1976, GT had already been in schools for one year (PSD.1). The Curriculum Unit was also neglected in consultations and discussions about GT (CU.2). The GT Curriculum Officer commented that the Curriculum Unit experienced only a minor association with GT, while the Acting Superintendent for Curriculum maintained that it had been a 'rather unsatisfactory' relationship. 'At no stage were we actually asked to help in planning or implementation, nor were we consulted on the feasibility of the system'. Then, 'when things started to go wrong, teachers and the Inspectors began to criticise Curriculum for not doing anything to help generalist teachers' (CU.2).

Although unsure, the former Superintendent of Inspections could only recall discussions about GT occurring in Inspectorial meetings. From these meetings, inspectors were required to encourage schools 'to try out this idea'. The only section of education headquarters with any real involvement in GT was thought to be Secondary Division and 'there was no contact ... with the Curriculum Branch to develop any curriculum or any set of syllabuses to be taken by one teacher' (SD.1). Yet, by 1977 GT was mandatory in schools.

Thus, at headquarters level, any communication between sections was almost non-existent, yet within Secondary Division, discussions about GT seemed to have occurred. The main communciation with schools was through the Regional Secondary Inspectors who were required to ensure GT was implemented according to departmental directives. Teachers were apparently not consulted in any systematic or coherent way for their views on GT (CU.2).

Trialling

Part of the answer to the question of whether GT was a limited experiment or planned change might be resolved if the experiment had lead to trialling on a planned and systematic basis. To some extent GT appears to have been based on ideas tried out in schools, such as Brandi during 1973 (Keating 1976), however the Acting Superintendent for Curriculum stated that 'it was never trialled in schools. Schools weren't consulted about it either'. Yet the former Assistant Secretary for Secondary supported by the Assistant Secretary for Planning Services Division, maintained that the various discussions on GT culminated in some headmasters of schools agreeing to introduce GT on an informal trial basis in their schools to test its effectiveness, but which schools these were, respondents were not sure.

However, no formal trialling of GT was conducted (SD.2). This was attributed to 'change at the top, change in emphases, changes in planning'. To introduce change into a system through testing, trialling, evaluation and retrialling requires considerable amounts of time (SD.2). 'It takes you years and years of interminable trials and meetings to get your change, and then usually by the time you get it in, it's had it'. At the time GT was being introduced, PNG was approaching Independence. This was seen as the right time to 'whack ... [GT] ... in' (SD.2). The current Superintendent of Inspections maintained that the former Assistant Secretary 'took the view that, "OK ... Let's bring in change". Bang! and that's why it was there'. Rapid localisation of the upper echelons of the Department of Education was also occurring at this time 'so it was a good time psychologically, socially and politically to produce a rather significant change in secondary' (SD.2):

> The idea had been put forward by an expatriate, and it was up to the local people then, to see how this could be followed up ... It was up to the local Superintendents to see whether they felt that the local teachers would be able to cope with this new idea. Whether one teacher could teach across different subjects with mediocre (well, by our [western] standards) secondary and tertiary education themselves (SD.1).

Therefore, formal trialling of GT had not occurred prior to its implementation. With the advantage of hindsight, the current Superintendent of Inspections commented that,

> if things had gone right, we could have structured this much better ... but ... in this department, many of the decisions are made without much thought, follow through, things of the sort. That's how it happened.

Thus, GT was first seen as no more than an experiment, a pilot scheme to test the feasibility of such a programme in the PNG context:

> You might seem to think that it was a very haphazard way of starting something, but at the time ... the whole idea was to see if it was feasible or not. The whole idea was a pilot scheme or a trial run to see what sort of outcomes we could get from it (SD.1).

Later, when GT was actually formally implemented in schools, it was rationalised as being done on a 'no fuss' basis with little departmental support or guidance, and responsibility for GT was transferred to schools:

> It was introduced with very little background and very little practical help - teaching materials, philosophy, aims, goals. It was all on an ad hoc basis ... All we were asking were that it was one. We didn't say how much was to be done, or whether it was to be done completely

> ... Apart from this year, there was no real help. Any help which we sent out to schools was done, again, on a very temporary basis (SD.2).

The Assistant Secretary of the Planning Services Division would perhaps have the final word. GT was 'an administrative decision, badly thought out and rapidly implemented without too much preparation or trialling'.

2.5 Reactions to GT

Reactions to GT occurred at two levels, schools and headquarters. Within both groups, individuals reactions ranged between very positive and very negative. The perceptions of how Department of Education headquarters personnel viewed schools' reactions to GT will be presented first, followed by the reactions of personnel at education headquarters.

Schools' Reactions

Schools reacted to GT in an administratively positive way, according to departmental comment - that is, they implemented GT mainly in line with the organisational requirements stipulated by Secondary Circular Letter 1/76. Fully integrated lessons were unusual (RSI.2), however, with the majority of teachers teaching their subjects separately to the one class.

At a more individual level, inspectors noted rather mixed reactions amongst staff 'from those who work to the scheme almost completely, to those who believe they comply to the minimum asked of policy and are reluctant to place any importance on GT as a scheme' (RSI.4). Similarly, 'GT varies from an outstanding success to a non-event, because of: (a) prejudices for or against [and/or] (b) competence of staff available/allocated' (RSI.2). A number of examples of how schools and their staff coped with GT were outlined by one inspector (RSI.4). Three of these examples follow (none of these schools was included in the case studies):

School X: The programme was introduced by a Level 3 officer who set out a daily programme for one term. He did this by frequent meetings with the teachers, and daily deliberations on content, aids and methods. The Level 3 officer was then transferred, and the teachers remaining carried it on in the same pattern. However, teachers continued to leave or be transferred for some reason or another. There is now just one of the original teachers in the situation - a new co-ordinator of lesser ability, who refers back and mainly uses the programmes of the first teacher. The programme is static and on present indications, there is little prospect of its development. The scheme now works in grade 8, but it is heavily dependent on the quality of each teacher teaching the grade 8.

School Y: The programme is under the direction of a VSO, a teacher who is not yet registered because of her short time in the country, who has not yet had an inspection and a report forwarded to headquarters. All the teachers taking the programme are first year teachers. The generalist programme rates lowly in the timetable priorities. The extent of the programme is inhibited and the teachers had little feeling of identity. The aims could be clearer and because of the timetabling arrangement where the generalists, although taking a number of subjects, take only one in common, there is little communication between the teachers.

School Z: The school management chose the Generalist teachers. The management determined the subjects which would be covered. The result was the breakdown and abandonment of the programme in four months - in the main because of its non-acceptance by the teachers who were doing it. In 1975 the same school made a concerted effort to educate the teachers to what the programme hoped to achieve. The teachers were asked or invited to participate in the programme, and the selection of participating teachers was made on the responses to the invitation. The result was a much more acceptable programme, a far happier grade 7, much more efficient teaching. Again, the co-ordinator in 1975, who was a newly recruited UK teacher had an infectious interest in the teachers and the work, and a flair for diplomacy, and the programme was very much appreciated by the teachers themselves. The students made good progress.

The most important feature in each of these examples is that the initiator of GT in each of the schools and the way in which GT had been implemented largely influenced subsequent reactions of staff. In schools with 'a keen, enthusiastic and skilled co-ordinator', and where 'the whole approach in the lower part of the school may be geared to GT' then the programme played a more significant role (RSI.3). Another inspector agreed, observing that the attitudes held by headmasters were an important determinant in the outcome of GT:

> I find that headmasters will often take that latter [negative] approach to prove that GT won't work. If they are against it, and they're forced to introduce it, they give minimal support, and then say, 'See, I told you so. It didn't work'. On the other hand, the headmaster who provides the support will find it successful. It seems to go right back to the man in charge (RSI.5).

One of the main problems, according to one inspector, 'has been teachers non-acceptance of the principles of GT' (RSI.4). Associated with this was the often negative attitude of non-Generalist staff toward GT - an attitude all inspectors had noted. Some of the inspectors comments about this are worth repeating. One problem, for example, was the

> conservatism of teachers in some schools. This was not restricted to either expatriate or national teachers particularly. Where the senior staff, say the headmaster, reacted unfavourably to GT in some cases [the staff] were very reluctant to introduce it (RSI.3).

Similarly,

> those that are in a position to influence others, either because of a dominant personality or because of their senior position in the school ... are adversely influencing the generalist teachers by not giving them sufficient encouragement, or by dampening their efforts, because, as I see, they themselves don't see it as worthwhile (RSI.4).

The attitude of recently graduated teachers from Goroka Teachers' College was also commented upon, where a 'fear of GT' was held by the graduates. 'It is generally considered that this was largely aggravated by negative comments from G.T.C. staff' (RSI.2). This led to lack of confidence and consequent 'poor performance' by teachers (RSI.5). While such reluctance by staff could be considered a 'normal' reaction, inspectors believed the reluctance could have been overcome by more effective planning (RSI.5), or by recruiting or training teachers with skills in more than two subject areas (RSI.3).

Associated with these problems, inspectors commented on the lack of sufficiently well trained and experienced staff in schools to cope with GT, and on generally inadequate or poor organisation in schools. A suitable co-ordinator was thought to be a person

> temperamentally suited ... to do frequent informal supervision with teachers ... to give teachers the material and the help as it seems to be needed ... who can give scope for experiment ... who has the initiative required ... who has the scope for the analysis of problems and determining how to rectify them (RSI.4).

Such a person would find the organisation and preparation demanded by GT required considerable time if it was to be effective (RSI.4, RSI.5). Teachers were seen to tire of this demand very quickly, however, with the result that teaching became less effective than specialist teaching, and consequently, pupils were the ones often disadvantaged. One inspector also commented that some of the problems could be traced to a situation where insufficient time was allocated for effective and efficient planning of GT during school hours (RSI.4).

Therefore, inspectors had noted quite variable reactions from teachers to GT, which depended on the nature of the leadership provided in schools and to how well organised GT was in individual schools. The attitudes of non-generalist staff and Goroka Teachers' College toward GT were also seen to be significant in promoting negative attitudes amongst teachers.

Headquarters Personnel Reactions

GT seemed to receive mixed reactions from departmental personnel. According to the current Assistant Secretary for Secondary, there were those who considered GT worthy of attention (mainly Secondary Division personnel), those who were against GT (mainly Goroka Teachers' College), and those who reacted neither strongly for or against GT (mainly the Curriculum Unit).

Goroka Teachers' College was roundly criticised at various times by the Assistant Secretaries for Secondary Division and the Curriculum Unit. Conflict also developed between Secondary Division and Goroka Teachers' College, and, for reasons attributed to personality clashes, effective communication between Secondary Division and Goroka about GT, ceased. Goroka Teachers' College was seen to be obstructionist in 1974 because trainees were being trained to teach in two rather than three subject areas, thus making it difficult for them to effectively teach in a three subject GT programme. Similarly, criticisms were also levelled at Goroka Teachers' College staff who were considered 'far too sympathetic' toward graduates who were possibly faced with teaching GT. 'Life was not meant to be easy and Goroka Teachers' College staff were saying it was meant to be easy. And I think Goroka Teachers' College has got to stand for the fact that ... at the field level, it hasn't been as positive as it could have been to help the situation' (SD.2). The Department of Education 'wanted Goroka graduates to be able to handle about three subjects over four years' (AS.1) - a request which Goroka Teachers' College did comply with in 1975. Curriculum also criticised Goroka Teachers' College for the two subject approach which Curriculum personnel thought 'short-sighted'.

Goroka Teachers' College personnel were equally as keen to defend their position and countered such attacks by criticising the attitudes of each of these sections at education headquarters toward the role the College was expected to play with regard to GT. The Principal of Goroka Teachers' College, for example, replied to criticisms by inspectors made at a Regional Secondary Inspectors Conference:

> The underlying point is taken that many Goroka graduates are frightened of generalist teaching. We believe this feeling is a combination of many factors:
>
> (a) 1976 graduates could not possibly have been fully prepared for generalist teaching - two-thirds of their course had passed before its introduction.

> (b) This fear is easily generated by not exactly knowing what they will be facing; staff cannot dispel this effectively as there still is no clear policy.
>
> (c) Negative attitudes can be inculcated in students by contact with Goroka diplomates in the field who have been pitched in at the deep end.
>
> (d) Generalist teaching as interpreted by some schools is farcical and if dumped on a new graduate can be overwhelming. If integration of subject matter through disciplines is employed it must be the experienced teacher who is expected to cope, not the beginner with so many other problems to overcome.
>
> The assertion of negative staff attitudes is denied. However staff freely admit that they do not conceal the difficulties students will inevitably face in a generalist course (Goroka Teachers' College 1977).

Goroka Teachers' College claimed there was no real consultation between the department and the College about GT at any time during the planning or implementation stages of the programme, apart from one letter written in June 1974, which advised Goroka Teachers' College of potential curriculum changes (later outlined in Secondary Circular Letter 15/74). Goroka Teachers' College was asked in this letter by the former Assistant Secretary for Secondary to consider possible ways of preparing teachers for generalist rather than specialist subject teaching. Nothing was definite at that stage, however.

The reaction of the Curriculum Unit personnel toward GT was not really one of 'no reaction' as previously described by the current Assistant Secretary for Secondary Education. It was more one of a fairly strong negative reaction, accompanied by little positive action. Little effort was initially made by the Curriculum Unit to develop materials 'because we haven't been able, to our own satisfaction, get a clear idea of what [Secondary Division] want. What are the real priorities? We haven't been putting a high priority on supporting GT'. Of the Curriculum Unit's priorities, GT was the least important. 'In fact, it hasn't got a great deal of support at all' (CU.1).

One of the main problems, Curriculum personnel argued, was lack of trained or experienced staff for curriculum development work in GT (CU.1, CU.2). Although a temporary curriculum officer was appointed for GT - two years after the programme had been introduced to schools - that person had no training and was receiving no instruction in that position:

> It's a new thing, and they should have given me set points or directions ... There was nothing. They just wrote me a letter and said, 'We are recommending you to come as a Generalist Curriculum Officer and provide something. Supplementary materials for the teachers'. That was all (CU.3).

The Superintendent of the Curriculum Unit commented that the GT Curriculum Officer was doing the best she could in circumstances where 'she has more or less been dropped on her feet'.

Before being employed in the Curriculum Unit, the GT Curriculum Officer had taught GT in schools. There, she said, her reaction had been positive with a willingness to experiment. This reaction soon turned to a feeling of frustration on being appointed as Curriculum Officer, because little guidance or support for her new position had been offered from headquarters personnel. Four main problems were identified by the GT Curriculum Officer. First, schools were not very co-operative in forwarding materials they had experimented with to the Curriculum Unit for consideration. Second, the type of work the GT Curriculum Officer was doing required an associate who could spend considerable time in schools with teachers in order to find out more about GT, its potential and problems. Third, the Curriculum Officer experienced a sense of isolation from other sections of the department particularly when curriculum officers 'just bring in problems and criticise' GT. Finally, there were insufficient funds allocated for use by the GT Curriculum Officer for travel and research (CU.3).

Reactions to GT varied quite markedly between the administrative and institutional levels of the system. At the level of the school, the reactions of staff depended very much on how school administrators perceived GT and the way in which GT in the schools was organised. The reactions to GT within the department were not so clear cut, however. The implication was that there was an absence of effective communication between sections because of departmental rivalries and politicking. This meant that GT was given less consideration and perhaps support by some sections of the department than it might otherwise have received.

2.6 The Success of GT

The question on the success of GT was kept open so that respondents could define success in their own terms, and, as a result, a variety of interesting comments were received. The overall feeling that emerged seemed to be one of uncertainty about the degree of success GT had enjoyed, and many responses were accompanied by conditional statements. Discussion will first of all examine opinion on the chances GT had of succeeding from personnel who had been involved with GT initially. Second, the chances GT had of succeeding in 1977 will be considered. Finally, general opinion on the reasons why GT had or had not been a success will be presented.

GT was thought to have had only a 'ten percent chance of survival' when it was first introduced to schools, commented the current Superintendent of Inspections. Similar comments were made by personnel in the Curriculum Unit and Planning Services Division. The reasons for its potentially 'limited' success were because

> it was introduced without any real consultation with the schools, none with Curriculum Officers, no thought of how it would affect the curriculum, no thought given to in-service training, and no campaign to sell it to the teachers - apart from

> belated attempts based largely on spurious arguments when schools began to complain (CU.2).

The result of this had worked to turn 'teacher trainees and new teachers against teaching in many cases' (CU.2). However, the former Assistant Secretary for Secondary argued that

> despite the probable gulf between theoretical model and implementation, I am inclined to believe that a poorly implemented approach to generalist teaching would be preferable to the rigid, subject-dominated, compartmentalization in some high schools that 'generalist teaching' was a reaction to.

As an experiment, GT was seen to have had a reasonable chance for succeeding. However,

> to extend it throughout the system might have been difficult. It would have needed selling to the more traditionalist headmasters and staff who were committed to a subject oriented high school system. The demands on teachers would have been heavy ... But re-educating and liberalising the views of expatriate teachers was a constant task and the possibilities of success were probably good. I must emphasise though, that generalist teaching was still very much in the exploratory stage - a sound theory I believe, but in need of working out in practice - and of curriculum modifications.
>
> To make the idea take off throughout the system would have been by no means easy. I think if the people initially involved at secondary Headquarters had remained we would have tried to:-
>
> 1. Encourage its phasing in over a two or three year period.
> 2. Use it as a means towards further curriculum development: we were all keen on grouping subjects and eventually evolving a curriculum in three major areas: communication skills, community skills, technological skills.
> 3. Sell it to the schools and Goroka Teachers' College. Incorporate primary teachers (expatriates) into the high school staff to make use of their generalist traditions (AS.1).

This is the procedure the former Assistant Secretary for Secondary maintained would have been essential if GT was to be extended throughout the system and be successful. It is significant to note, however, that this respondent was thinking of GT being taught initially by expatriate rather than national teachers. Such teachers comprised a large section of the teaching force at that time. Since 1975, however, rapid localisation of the secondary teaching force had occurred, with approximately half the force being national officers by 1977.

Quite a marked difference was seen to exist between the plans of 1975 and the practice of GT by 1977. By 1977, there was still a range of opinion on the current success of GT, and the opportunities it had for continued success. Because the ultimate success of GT depended upon the nature of individual schools and teachers, some respondents felt unable to comment on how successful GT had been in the past and was likely to be in the future (AS. 2, CU.2, CU.3).

Because pupils seemed to be learning effectively, the Curriculum Officer for GT thought GT had been successful. The Superintendent of Curriculum indicated that as 'a simple operational issue, I would have thought it would have been practicable, even if teachers weren't trained to teach particular subjects'. However, if subject integration was considered part of GT, the curriculum development work this would require of teachers would have been 'beyond their capacity'. Moreover, the bulk of the materials distributed to schools by the Curriculum Unit on GT had been aimed more at expatriate training and experience than at that of national teachers and was, therefore, largely irrelevant to many teachers.

While GT might have been operationally or organisationally successful, where an integrated subject approach was attempted its success was doubtful. Such a view was also reiterated by the Assistant Secretary for the Planning Services Division, who based his comments 'purely ... on my initial assumptions of the impracticability of the concept':

> I don't consider the national secondary teachers have sufficient training, or sufficiently broad education, or a sufficiently broad grasp of the education process to be able to generalise across a range of subjects in an efficient way. I suspect that some of the projects in GT work quite well because of better trained and graduate overseas teachers. However, this is a passing group and it would be unwise to base our teaching policies on their capabilities (PSD.1).

The Acting Superintendent of Curriculum was non-committal about the success or failure of GT, however the tenor of his responses indicated that GT had been unsuccessful. He was critical of

1. Lack of planning before the introduction of GT.
2. Lack of in-service training.
3. The failure to involve Goroka Teachers' College in any way prior to its introduction.
4. Impossibility of Goroka Teachers' College trying to prepare specialists who are supposed to be generalists.
5. The unreasonable expectation that first year out teachers should be able to handle what is a fairly sophisticated approach to teaching, without any real help.
6. Lack of materials written specifically for GT (for example, a structured teachers' guide).

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5. The unreasonable expectation that first year out teachers should be able to handle what is a fairly sophisticated approach to teaching, without any real help.
6. Lack of materials written specifically for GT (for example, a structured teachers' guide).

7. The practice of giving GT to the most inexperienced teachers in the schools - something that lies squarely at the feet of the headmaster.

The implication of this was that GT had not, and was not likely to be successful because of insufficient planning, lack of co-ordination and communication between different levels of the system, and no training or support for teachers.

Inter-departmental conflicts about GT also existed and these may have had some effect on the outcome of the programme. The most noticeable of these was between Secondary Division and the Curriculum Unit. Each was critical of the other's role in GT.

Secondary Division personnel said of the Curriculum Unit:

> Curriculum's contribution really never started until this year [1977] ... Curriculum ... only paid lip service to the whole thing. [Curriculum Unit personnel were] against the philosophy of the thing. Most of the people here in Curriculum are secondary school teachers and are involved in their ... own areas - upgrading, reviewing, changing or writing syllabuses on a specialist basis (SD.2).

Despite these criticisms, by 1977 GT had also been considered successful by some personnel. The Superintendent of Inspections gave two reasons for the success of GT. First, the 'social adjustment kids have made' to life in secondary schools had been considered valuable, and second, GT was 'a very good remedial year between very poor teaching in standard six and high school'. With GT, teachers had an opportunity to develop and improve pupils' basic skills.

The chances of success of GT both in the past and in 1977 was perceived to be very much dependent upon the attitude 'of the head teacher and the enthusiasm of his staff' (SD.1). In general terms, however, most respondents were uncertain about the success of the programme. If GT was defined purely in organisational terms, then GT had certainly proved successful. If GT referred to a style of teaching as well as to organisational considerations, then the aims of GT had not been achieved and the programme could, therefore, be considered a failure. If GT had been organised and taught by keen, enthusiastic and experienced teachers then it was usually successful. Where teachers were teaching GT against their will, the reverse was also true. If GT had been a failure in schools then data also indicate this could be attributed to lack of co-operation from Goroka Teachers' College, Secondary Division, and the Curriculum Unit - either individually or collectively.

As a fully implemented programme in schools, providing adequate preparation and support services had been provided, GT could have been successful. By 1977, however, two respondents were doubtful about the future success of GT (PSD.1, CU.2), while two respondents were enthusiastic (SD.2, AS.2), and two non-committal (CU.1, CU.3). After weighing the arguments and comments presented by various personnel, it would appear that from the Department of Education viewpoint, GT was seen to have a rather poor opportunity for succeeding - a conclusion influenced largely by the vagueness surrounding the whole programme.

2.7 The Future of GT

The opinions of departmental personnel on the future of GT tended to be vague. Certainly, there was no consensus of agreement about whether or not the programme should or should not continue in schools. Two respondents thought GT should continue in schools. One of these respondent's reasons were, first, that it was already in schools, so it should stay, and second, because teachers seemed to be involved with it (CU.1). Some of the reasons given by another respondent were on the grounds that schools seemed to be making some progress with GT, and because positive support was being provided by the Curriculum Unit in the form of materials (SD.2).

Only one headquarters respondent definitely thought GT should cease. If the programme had been instituted merely to ease administrative and staffing problems, then it should not continue in schools (PSD.1). Rather, 'steps should be taken to improve the posting system' of teachers to schools, and that 'better training of specialists' in three subject areas should be considered (PSD.1). One Regional Secondary Inspector also considered that 'no real harm' would come of 'dropping the programme completely' (RSI.1).

Some respondents were non-committal (AS.2, CU.1) about the future of GT, with some suggesting that it be optional (CU.2, RSI.3, RSI.4, RSI.5). Some respondents were not prepared to commit themselves either way. The Superintendent of Curriculum, however, admitted to having 'private doubts and reservations' about the successful future of GT. In a similar frame of mind, the Acting Superintendent of Curriculum said, 'I suspect that it will die a fairly natural death soon in most schools'. 'It depends very much on the circumstances', however, 'if SSCEP [Secondary Schools Community Extension Project] planned for grades 9 and 10 becomes acceptable, GT could well be phased out' (AS.2). The former Assistant Secretary for Secondary, on the other hand, was surprised that GT was still in schools in 1977. 'I imagined it would have died a death but if it's still operating, thats reassuring'.

Regional Secondary Inspectors generally provided more comment on why and in what circumstances GT should be made optional for schools. Some inspectors thought GT should be continued, but with provisos such as 'there should be quite a lot of flexibility about its implementation', and where a more viable alternative presents itself, schools should be able to follow that alternative (RSI.4). Furthermore, GT should continue only in those schools with characteristics suited to making GT viable and a success. GT was seen to need

> a large school, and a correspondingly large staff. A small and medium sized school, particularly the boarding schools, don't like

> it. They [teachers] see GT first as an added burden to an already heavy responsibility, and second, as an interruption of the more appropriate duties of those trained in certain subjects ... In this case, for a subject teacher to be solely employed as teaching a grade 7, is seen as a waste of talent, and a second best and an inappropriate alternative (RSI.4).

2.8 Policy: Recapitulation

A brief summary needs to be made at this point. If GT was only being trialled on a 'small scale "enthusiast" base' (AS.1), then perhaps limited consultation with other groups about GT could be justified - until of course, its value had been demonstrated. The idea of GT would then have required wider circulation amongst groups likely to be involved with such a programme at every level of the system. Other personnel, however, saw GT as part of the system and part of the schools' curriculum. They also believed that consultation with supposedly essential groups with an interest in GT did not take place. So the situation seemed to be one of, first, GT the experiment with no long term or large scale planning having been considered at that time. Then, suddenly, the situation seemed to be one of GT the reality, still apparently with no planning or consideration of the implications of implementing such a programme in schools. What was GT then - a limited experiment or a planned change?

Despite the confident assertion by the former Assistant Secretary that aims did exist for GT, there appeared to be no documentary evidence to support this claim, and certainly none of the other respondents made mention of such aims. Formal statements of aims did not seem to exist at the time this study was being conducted either, however, certain patterns or trends in aims had emerged from school practice. Pupil-centred aims were apparently the focus around which GT was developing. Schools were attempting to minimise pupils' adjustment problems between life and work in a primary system and the expectations and demands of a secondary system in both personal and academic spheres. The feedback from schools to different sections of the Department of Education must have emphasised this aim, for it was considered a desirable aim by most personnel interviewed.

GT was apparently not implemented in schools on a national scale in any coherent or systematic way. Schools were presented with the idea of GT - without background information, controlled trialling or planned evaluation - and asked by the Department of Education that it be implemented. Such an approach was considered acceptable by some respondents in light of changes that were occurring in education at that time. Others, however, were critical of the methods used to introduce this change to schools. However, it is clear that GT was not, in fact, a properly planned and implemented change at all. At one stage, schools were requested to experiment with GT, the results from this experiment to be used by the department for devising a major programme for the future. Soon after, however, one finds that a programme called 'Generalist Teaching' was being practised in schools - a programme seemingly lacking precise definition, aims or policy. As the Acting Superintendent of Curriculum put it:

> The introduction of Generalist Teaching is a classic example of the introduction of a major change in curriculum and the organisation of the school without any planning, consultation with field staff or curriculum officers, or any thought given to any pre-service or in-service planning.

Thus in 1977 the future of GT was uncertain. This was further complicated because no one could really define what GT was, or why it was introduced to schools in the first place. Department of Education headquarters personnel held many conflicting ideas about GT - a situation which did not provide a very stable and secure base from which teachers could develop their work. GT had been in schools for three years by the end of 1977, but still there was no consensus of opinion about what GT was, what it was trying to achieve and what it had achieved by that time.

Obviously GT had been the centre of considerable controversy at headquarters. In fact, one inspector commented that

> now the approach has been fairly well accepted in schools, most of the argument has died down. In my experience in the schools in my region, this question of Generalist Teaching is largely a dead issue ... I just hope that there will be no effort to stir up the controversy again about whether or not Generalist Teaching is a good thing (RSI.3).

This statement implied that GT was a latent issue which could still create controversy even in 1977. Because GT had become a 'dead issue', not only in schools, but also at education headquarters, Department of Education personnel preferred to leave it that way.

To headquarters, GT was neither a total success or a total failure - it seemed to be merely a programme that was in the schools, and a programme that was no longer causing too many negative reactions by that time. According to headquarters personnel, schools did not fully accept or completely reject Secondary Circular Letter 1/76. The minimum requirements of that document were fulfilled. Headquarters personnel reactions to GT were neither strongly for or against GT - they too seemed to have become either used to GT, or too tired of complaining. The effect of this headquarters confusion on the practice of GT is the subject of the next chapter. Chapter 3 presents results from the questionnaire survey of 33 schools. This survey provided the information headquarters personnel did not have on the types of teachers involved with GT, how GT was organised in schools, the advantages, disadvantages and problems associated with GT and the degree of success GT had experienced in schools.

Chapter Three

PRACTICE I: SCHOOL SURVEY

This chapter contains the most comprehensive description of the practice of GT in schools. Data for this chapter derive from the questionnaire survey of schools in 1977, and provide a means for comparing the practice of GT with the headquarters policy presented in Chapter 2. This chapter centres around eight discussion points: first, the personal and professional characteristics of teachers teaching GT in 1977; second, the ways in which teachers defined GT and its aims; third, the ways in which schools organised GT; fourth, classroom approaches used by teachers; fifth, the advantages and disadvantages of GT for both pupils and teachers; sixth, a discussion about the nature of the problems faced by Generalist teachers and the assistance received; seventh, whether teachers thought GT had been a success in their school, and the reasons for this success or failure; and finally, a section comprising any other comments teachers had about GT.

3.1 Teacher Characteristics

Table 3.1 shows that Generalist teachers were usually young (44% were 24 years of age or younger) and, therefore, possibly inexperienced junior staff of provincial high schools, with 78% of all Generalist teachers holding assistant teacher status. Few teachers holding senior positions of Subject Master/Mistress or above had any direct association with GT through classroom teaching. This does not mean that there was no association, however, because such staff may have been involved in GT, however female teachers were more highly represented when compared with the 1977 PNG teacher sex ratio of 64% male and 36% female teachers (Planning Branch 1977: Table 11). The proportion of national and expatriate teachers compares favourably with the national (PNG) average which showed that 51% of teachers were national officers and 49% expatriate officers (Planning Branch 1977: Table 11).

Table 3.2 provides a detailed breakdown of the number of subjects Generalist teachers were trained to teach, and the number of subjects they were, in fact, teaching. Considerable differences existed between the numbers of subjects teachers were trained to teach and the numbers of subjects they were actually teaching as Generalist teachers. As a result, many teachers were teaching subjects for which they had no training. 64% of these teachers were trained to teach one to three subjects, while in GT, 84% of them were teaching three or more subjects. Mathematics, English, Social Science and Science were the most affected areas. 18% of respondents were trained to teach Mathematics, for example, while 70% were actually teaching that subject; only 30% were trained for English, but 69% of respondents were teaching it. Similar imbalances became obvious when comparing the numbers of subjects for which teachers had been trained to teach, with the numbers of subjects they were actually teaching as Generalist teachers. 30% of teachers were trained to teach four or more subjects, but 68% were teaching this number of subjects.

Table 3.1 Characteristics of Generalist Teachers, 1977

Characteristics		No. of respondents	% of respondents
Age	< 20	8	8
	20-24	35	36
	25-29	22	23
	30-34	12	13
	35 >	10	10
	Non-responses	9	9
	Total	96	99
Sex	Male	45	47
	Female	45	47
	Non-responses	6	6
	Total	96	100
Nationality	National	51	53
	Expatriate	41	43
	Non-responses	4	4
	Total	96	100
Breakdown of Expatriate Teachers	British	18	44
	Australian	17	41
	Canadian	3	7
	U.S.	2	5
	Indian	1	2
	Total	41	99
Position	Assistant teacher	75	78
	Subject Master/Mistress	10	10
	Head Master/Mistress	4	4
	Non-responses	7	7
	Total	96	99

More respondents (34%) than for any other choice thought that teachers should have three or more years teaching experience before being appointed to a GT position, as Table 3.3 shows. Few teachers thought that recent graduates or even teachers with one years teaching experience should teach GT. Two or more years experience were considered necessary by 60% of respondents for the following reasons: teachers, first of all, need to gain general teaching experience in the classroom before attempting such a programme (60% of these respondents); second, management and organisational skills required by GT could only be acquired over an extended period of time (14%); third, GT demands a wide general knowledge and considerable 'world experience' (11%); and fourth, teachers need to be familiar with school routines, the knowledge of which could be gained only by working at the school (4%). Other general reasons given for teachers needing two or more years experience included the need to be familiar or secure in specialist subjects before attempting something like GT; and that a teacher needed to show competence and success in specialist areas before attempting to cope with GT.

Table 3.2 Subjects Teachers Trained for and Teaching, 1977

Subjects	Respondents trained to teach them		Respondents actually teaching them	
	N	%	N	%
Mathematics	17	18	67	70
English	29	30	66	69
Social Science	22	23	64	67
Science	16	17	41	43
Commerce	12	13	26	27
Expressive Arts	11	11	37	39
Agriculture	6	6	28	29
Practical Skills	1	1	12	12
Home Economics	7	7	11	11
Religious Studies	5	5	10	10
Library	3	3	3	3
Guidance	0	0	8	8
Other*	52	54	3	3

Number of Subjects	Respondents trained to teach them		Respondents actually teaching them	
	N	%	N	%
One	7	7	3	3
Two	29	30	7	7
Three	26	27	15	16
Four	3	3	28	29
Five	1	1	20	21
Six or more**	25	26	17	18
Non-responses	5	5	6	6
Total	96	99	96	100

* The 'Other' category referred mainly to primary trained teachers or expatriate teachers who were trained to teach History, Geography, Languages (French, Latin, German, Japanese, Welsh), Modern Studies, Current Affairs and Physical Education.

** Respondents trained to teach six or more subjects were generally primary trained teachers.

Table 3.3 Years Experience Needed Before Becoming a Generalist Teacher

Number of Years	N	%
Recent graduate	12	13
At least one	14	15
At least two	25	26
Three or more	33	34
Non-responses	12	13
Total	96	101

There were 28% of respondents who thought that recent graduates, or a teacher with only one year of experience should teach GT. The reasons teachers gave for this length of time were that GT would provide valuable experience and training for recent graduates (32% of this group of respondents); second, that recent graduates would be more amenable to the new ideas promoted by GT than long experienced teachers who would tend to be more discipline oriented (11%); and finally, related to the previous reason, was that teachers were less likely to become subject-bound if they taught in the GT programme immediately on leaving their teacher training college (5%). A variety of other reasons why teachers with limited experience could cope with GT were given. These included that by having one group of pupils more often than the normal specialist system allowed, teachers would be more readily able to experiment and develop teaching techniques; that general academic levels at junior secondary level were so 'low', recent graduates should not experience difficulties teaching GT at this level; and that recent graduates 'should start at the bottom anyway' (that is, with junior rather than senior classes). However, 16% of these respondents qualified their answers by pointing out that new teachers should be involved with a programme such as this only if they have had the 'appropriate' training and experience.

Table 3.4 is based on cross-tabulations of personal and professional teacher characteristics. The results of the Chi-square test revealed that nationality was the most important variable in the analysis of GT teacher characteristics. Generalist teachers tended to be young national officers with less than three years of teacher training in from one to three subject areas. The majority of these teachers held junior positions as Assistant teachers in schools and were teaching four to six subjects, which was often twice as many as they were trained for.

Table 3.4 Phi-coefficient Correlations between Teacher Characteristics

Characteristics*	Personal Characteristics			Professional Characteristics			
	A	S	N	P	YT	TG	STd
Sex	.14						
Nationality	.36**	0					
Position	.10	0	.14				
Years Teaching	.20	.10	.54**	0			
Terms GT	.17	.10	.10	0	.10		
Subjects Trained in	0	.14	.22	0	0	.17	
Subjects Teaching	0	0	0	.42**	0	0	0

* A - Age; S - Sex; N - Nationality; P - Position; YT - Number of years teaching experience; TG - Number of terms Generalist Teaching; STd - Number of subjects trained to teach.

** χ^2 significance of .05 or greater.

Cross-analysis of age with the personal and professional characteristics of teachers showed only one significant Chi-square result. There were significantly more national teachers aged under 25 who were Generalist teachers than expatriates (χ^2=11.13, df=1, p=.001, ϕ=.36). Otherwise, Generalist teachers over and under 25 years of age were evenly distributed for the remaining variables.

No signficant Chi-square results were indicated from cross-analyses of sex with the other variables and from this, one can assume that male and female Generalist teachers were evenly distributed amongst the variables. However, because female teachers comprised only 36% of the country's secondary teachers in 1977 (Planning Branch 1977: Table 11), there was, in fact, a relatively higher proportion of women Generalist teachers.

Nationality revealed two significant Chi-square results when cross-tabulated with teachers' personal and professional characteristics. National teachers generally experienced fewer years of teacher training than expatriate teachers, and were trained in fewer subjects than expatriate teachers (χ^2=26.23, df=1, p=.001, ϕ=.54). Such a strong significant difference in the first instance could be attributed to the fact that most national teachers do a diploma course and are rarely university or degree trained, which requires more years of training than a diploma course. The strength of the relationship between nationality and the number of subjects a teacher had been trained to teach was not so great (χ^2=4.64, df=1, p=.05, ϕ=.22), yet national teachers were far more limited in the subject areas they would be able to cope with than expatriate teachers. Expatriate and national officers were evenly distributed amongst the remaining three characteristics of position, the number of terms in the GT programme and the number of subjects respondents had been teaching.

Only one significant Chi-square relationship could be identified when position was cross-analysed with teachers' personal and professional characteristics. There was a strongly significant relationship between position and the number of subjects actually being taught by Generalist teachers. GT was given to Assistant teachers who were required to teach four or more subjects, despite the lack of training and experience they had for coping with such a demand. Experienced and more senior members of staff taught significantly fewer subjects than Assistant teachers (χ^2=15.83, df=1, p=.001, ϕ=.42). Otherwise, Generalist teachers who held either junior or senior positions in schools were evenly distributed for the remaining three variables.

From these data it has become obvious that the majority of the Generalist teachers comprise a relatively disadvantaged group within the secondary system. Significant and strong correlations revealed that Generalist teachers were predominantly female and young. Professional qualifications and experience were relatively lower for these teachers than for the rest of the Generalist teachers.

3.2 Definitions and Aims of GT

Teachers were asked to offer a definition of what they thought GT meant. Results indicated marked differences of opinion by teachers, with few common themes readily apparent. These 'definitions' are presented in the order of frequency of response. Only 37% of the teachers who responded to this question defined GT in a similar way to that described in Secondary Circular Letter 1/76. The teachers' definition was that GT was where one teacher taught one class for most of that class' subjects. GT was also defined by teachers as: one teacher teaching more than one class and 'integrating' subjects (11% of responses) providing a 'basic education' in most subject areas (9%); making education a 'meaningful whole' for pupils (7%); thematic teaching (6%); continuing the primary style of education (4%); and it was also seen to mean improving pupil/teacher relationships (4%). Numerous other definitions of GT were also offered: 'teaching subjects a teacher is not trained for'; 'teaching subjects at a superficial level'; a way of preparing pupils for the future; a way of coping with the teacher shortage and financial problems faced by the government; a general approach to teaching which tries to avoid subject disciplines; a way of teaching with opportunities for relating work to local needs; 'real life' learning with subjects being taught as they are required; pupil rather than subject centred education; a means for making teaching easier; a method for making education 'more natural'; and to help pupils understand that education is a 'whole in itself'.

Thus the definitions of GT were fairly vague and varied markedly from teacher to teacher and between schools. Many of the definitions given by teachers were not definitions at all - rather they tended to be possible reasons for why GT was initially introduced to schools. It was difficult, therefore, to isolate common ideas or concepts about GT from this list. Such a problem is important for it revealed the lack of teacher consensus or understanding of what GT was - a situation having far reaching implications for the development of aims, organisation and classroom approaches to GT. Similarly, such considerations were likely to affect the ultimate success of GT in practice.

Turning to what teachers thought the aims of GT should be, lack of consensus was again the most obvious feature of the responses. The aims given by teachers for GT included: to provide pupils with a sense of personal security and a means for adjusting to life in a secondary school (14% of respones); to provide a 'basic education' through interrelating subjects (13%); to stop compartmentalising subjects (13%); to strengthen pupils' basic literacy and numeracy skills (9%); to prepare pupils for the future (9%); to get to know pupils through developing closer pupil/teacher relations (8%); to provide pupil rather than teacher-centred education (7%); to provide lesson continuity and flexibility (5%); to apply classroom theory through project and practical work (4%); and to alleviate the teacher shortage in schools (3%). Less common aims given by some teachers were to interest teachers in subjects other than their specialist areas; to team teach; to encourage pupils to learn 'bits and pieces' from a variety of subject areas; to recruit teachers to secondary from primary schools; to spend more time on areas or topics of interest than the usual teaching style and organisation permitted; to present lessons in 'interesting' ways; and to encourage all schools to follow the same approach to teaching.

Despite the variability and vagueness of these aims, certain trends did become apparent. The most obvious of these trends was the emphasis by Generalist teachers on pupil-centred aims. Teachers looked to the types of adjustments pupils must make when transferring from a primary to a secondary system of education, and the later adjustments a high proportion of pupils would be required to make if they were 'pushed out' of the system, and were unable to proceed with their education. The aims also focused on the nature of education pupils received at school and teachers indicated they considered GT able to provide a more relevant and well-rounded education than the usual specialist style of teaching.

Even though a 'definition' of GT was provided by the Department of Education in Secondary Circular Letter 1/76, a minority of teachers (37%) perceived GT in that way. Personal definitions covered a wide range of teaching styles and approaches, ways of organising classes in junior high schools, and personal opinions or criticisms. While such variability might be considered desirable in some systems, in the context of the PNG system, the desirability of such a situation is doubtful. The fact that teachers obviously had difficulty articulating what 'Generalist Teaching' was, and how to define it in a few sentences, reinforces such reservations. It is interesting to note, however, that even though the same teachers were able to provide aims for GT from which areas of common agreement evolved, confusion and uncertainty seem to have been apparent through the use of vaguely defined terms such as 'basic education' and 'bits and pieces'.

3.3 Schools' organisation of GT

Despite the uncertainty surrounding precise definition of and statements of aims for GT, the ways in which schools organised GT and teachers' approaches to GT in the classroom were far more easily defined. Table 3.5 shows that the most usual way for schools to organise GT was by having one teacher allocated to the same class for two to four subjects. The subjects not taught to that class by Generalist teachers were taken by the appropriate subject specialists. This meant, therefore, that schools were observing the requirements of Secondary Circular Letter 1/76 which specified that GT be organised with one teacher teaching at least three subjects (or half the total period loading) to the one class.

The same Secondary Circular Letter also suggested that co-ordination of GT in schools be undertaken by an experienced member of staff. However, Table 3.5 reveals that GT was usually organised by an individual Assistant teacher who was required to teach a normal teaching load as well as co-ordinate and organise GT. A slightly more equitable distribution of responsibilities and duties was observed where a group of all or some Generalist teachers and a senior member of staff shared these responsibilities. Where a Subject Master or Mistress was in charge of GT (a relatively high proportion were, when compared with the total numbers of Subject Masters/Mistresses actually teaching GT) they were in a somewhat difficult position. If they were a Subject Master or Mistress, then they would have held that position for a specialist area (eg. Mathematics, Social Science, English) as well,

Table 3.5 Schools' Organisation of GT, 1977

Types of Organisation	Respondents	
	N	%
One teacher teaching two to four subjects to the one class	55	57
One teacher teaching most subjects to the one class	13	14
One teacher teaching specialist subjects to the one class	11	11
One teacher teaching all subjects to the one class	8	8
Non-responses	9	9
Total	96	99

Organiser of GT	Schools	
	N	%
Assistant teacher	11	33
Subject Master/Mistress	7	21
Senior Subject Master/Mistress	3	9
Other*	7	21
Non-responses	5	15
Total	33	99

Who should organise GT	Respondents	
	N	%
An experienced Generalist teacher	24	25
Subject Master/Mistress with GT Co-ordinator	20	21
Group of Generalist teachers	10	10
Generalist teachers with GT Co-ordinator	8	8
Deputy or Head Master/Mistress	5	5
Other**	17	18
Non-responses	12	13
Total	96	100

* The 'Other' category of organisers of GT referred mainly to different groups of staff. The exact composition of groups varied from school to school.

** The organisers listed in the 'Other' category included teachers specialised in a wide range of subject areas; teachers from primary schools who were already experienced in the GT style of organising classes and lessons; senior or generally experienced staff; and a 'specialist' GT Co-ordinator with similar status and duties as a normal Subject Master or Mistress.

because no such specialist position existed for GT. Effectively, therefore, they were required to co-ordinate two teaching areas instead of only one. Furthermore, it is possible that such individuals would have had little or no experience teaching that programme and so would have had little understanding of the difficulties and problems Generalist teachers were facing.

Table 3.5 also shows that Generalist teachers would have preferred experienced staff co-ordinating the programme - such teachers presumably would not only have had administrative experience relevant for co-ordinating GT, they would also be familiar with classroom procedures and teaching methods, and would be able to offer valuable advice to relatively inexperienced teachers. As well as suggesting that someone with experience be in charge of GT, teachers also suggested that it be organised by groups of two or more staff - either senior or junior staff or a combination of these teachers.

Every suggestion teachers made about who should organise GT was based on the experience of the potential organiser. Subject Masters and Mistresses and/or a specifically designated GT Co-ordinator were considered important people to have as organisers by 21% of respondents because respondents assumed that such people would have already gained appropriate administrative and classroom experience. A group of Generalist teachers was suggested because they would 'know' what GT required, the potential problems teachers might face and because the nature of GT required them to co-operate closely with each other (10% of respondents). An already experienced Generalist teacher was put forward by 25% of respondents as a potential organiser of GT because such a teacher would have already acquired expertise in that area. Other suggestions included a group of Generalist teachers with a Co-ordinator because respondents said they would be directly involved, and therefore, would have more direct knowledge about GT (8%). Deputy Headmasters/Mistresses were thought to be potentially useful for timetabling and guidance.

Most schools had implemented GT in grade 7, while only about half the schools had GT in grade 8 at the time of the survey. Over half the schools (57%) had practised GT in grade 7 for from five to eight terms, while for grade 8, only 30% of schools had GT for a year, as Table 3.6 shows. The mean number of Generalist teachers per school for grade 7 was 4.27, while for grade 8, the mean was 1.66. Schools had GT in grade 7 for longer than grade 8 because of Secondary Circular Letter 1/76 which stated that GT was compulsory for grade 7, but where possible, it was to be implemented in grade 8.

Chi-square testing of cross-tabulations of data based on the type of organisation schools chose for GT was not possible because data were not able to be organised into sufficiently discrete categories for that purpose. However, when examining the results obtained from the discussion of who Generalist teachers thought should organise GT, it was possible to organise data in this way. Here, responses were cross-tabulated against personal and professional characteristics of teachers. This cross-analysis presented a similar picture to the results shown in Table 3.4, as nationality was again a significant variable. A significant difference existed between national and expatriate teachers

Table 3.6 The Length of Time GT had been in Schools and the Numbers of Teachers Involved, 1977

Time (in terms)*	Schools - G7		Schools - G8**	
	N	%	N	%
None	0	0	14	42
One	0	0	2	6
Two	4	12	4	12
Three	4	12	4	12
Four	2	6	2	6
Five	8	24	2	6
Six	4	12	0	0
Seven	4	12	0	0
Eight or more	3	9	0	0
Non-responses	4	12	5	15
Total	33	99	33	99

No. of teachers/school	Schools - G7		Schools - G8	
	N	%	N	%
One	0	0	21	64
Two	1	3	2	6
Three	8	24	3	9
Four	8	24	1	3
Five	8	24	2	6
Six	5	15	0	0
Non-responses	3	9	4	12
Total	33	99	33	100

* GT had officially been in schools for 8 terms at the time this survey was being conducted.

** G7 - Grade 7, G8 - Grade 8.

about who they thought should organise GT. National teachers preferred senior school staff such as Subject Masters or Mistresses or Deputy Headmasters/Mistresses, while expatriate teachers tended to favour a group teacher situation presided over by a co-ordinator ($\chi^2 = 6.43$, df = 1, $p = .02$, $\phi = .28$). Seniority was the most important criterion for national staff. The evidence for this has been presented in detail above, where administrative and teaching experience were considered important characteristics for a GT co-ordinator.

To recapitulate, the organisation of GT by schools in 1977 followed headquarters directives to a certain extent. Schools certainly fulfilled the type of organisation suggested by the Department of Education, however, the programme tended to be co-ordinated by Assistant teachers rather than senior school staff. Teachers would have preferred GT to be organised by experienced senior staff rather than by less experienced and junior staff. Most schools had implemented GT in grade 7 before grade 8. This meant, therefore, that GT had a far higher proportion of teachers for grade 7 than for grade 8.

3.4 Classroom Approaches to GT

Classroom approaches to GT seemed to vary as widely as the ways in which schools organised GT. Differences occurred not only between schools, but within schools as well, with different approaches seemingly utilised by individual teachers. Data were grouped into five categories for convenience, as Table 3.7 shows. However, these categories cannot be considered entirely discrete because overlap between categories was common.

Specific subject syllabuses were used widely by teachers, and few specific GT programmes were developed (Table 3.8). This was to be expected as the discussion on the approaches used by classroom teachers implied. Secondary Circular Letter 1/76 stipulated that schools develop their own 'integrated' curricula, yet few schools would have had sufficient teachers with the appropriate knowledge and skills to do this. Similarly, with GT so loosely defined by the Department of Education, and relatively few teachers being able to provide a coherent definition of aims themselves, the likelihood of a specific 'Generalist Teaching' programme and/or syllabus being devised at the level of the school was limited. Where GT programmes were in use, they were often drawn up by a group of teachers rather than individuals, as shown in Table 3.9. The figure of 40 respondents in this table is based on the number of teachers who said they used a GT programme (Table 3.8).

Table 3.7 Classroom Approaches to GT, 1977

Approach	Respondents	
	N	%
Separate subjects	21	22
Separate subjects with links between them	29	30
Integration	16	17
Thematic	14	15
Other*	6	6
Non-responses	10	10
Total	96	100

* Other approaches included project based work and team teaching situations.

Table 3.8 Use of Generalist Programmes and Specialist Syllabuses, 1977

Use	Generalist Programmes		Specialist Syllabuses	
	N	%	N	%
Yes	40	42	70	73
No	49	51	17	18
Non-responses	7	7	9	9
Total	96	100	96	100

Table 3.9 Authors of GT Programmes, 1977

Authors	Respondents	
	N	%
In-service courses	11	28
GT Co-ordinators and teachers	11	28
Officer in charge of GT	9	23
Individual teachers	6	15
Other*	3	8
Non-responses	0	0
Total	40	102

* Headquarters personnel in conjunction with teachers when those personnel were visiting schools.

The emphasis on groups with senior staff is worth noting. Senior staff had the experience and presumably expertise in such matters, while a group effort would provide an opportunity for teachers to discuss problems, air doubts and to acquire a feeling of security from group support.

Classroom approaches to GT remained vague, mainly because teachers were not sure about what GT was, and what terms like 'correlate' or 'integrate' or 'linking' really meant. Most of the teachers taught individual subjects separately because they reported, that was the approach they were used to, and felt most secure with. Specialist subject syllabuses were widely used, with few teachers able to or capable of drawing up a GT programme. Those GT programmes that were in use were written mainly by groups of teachers and/or senior teachers.

3.5 Advantages and Disadvantages of GT

GT provided many advantages as well as disadvantages and problems for teachers and pupils involved in the programme. Advantages for both groups tended to be personal, while disadvantages for teachers were professional, and for pupils, academic.

The main advantages of GT for pupils, teachers maintained, included getting to know their teachers 'better' (23% of responses); obtaining a more integrated, therefore 'whole' and 'well rounded' education (12%);

deriving a feeling of security in a new situation by having fewer teachers (11%); experiencing greater ease on transferring from the primary to secondary school (11%); a feeling of greater freedom for asking questions of the teacher (7%); being able to work in a more settled and less formal classroom atmosphere (5%); and pupils' problems and needs were quickly recognised and 'better' understood by teachers (4%). Other less commonly described advantages for pupils were that programmes could be more adequately designed for pupils' needs; pupils had more opportunities and time for practical work; pupils' interest in their lessons was greater; pupils were more conveniently able to work in friendship groups; better opportunities for remedial work and for strengthening pupils' basic skills were provided; pupils became more adequately equipped for village life; they had two years in which they could mature before moving on to grades 9 and 10; pupils got to know their teachers better which led to a situation of trust; pupils had opportunities and the freedom to test their ideas; and pupils with problems could be quickly recognised and given appropriate assistance and support. The advantages GT provided for pupils appeared to be mainly personal, with associated and academic oriented spin-offs. It must be remembered, however, that these benefits were the results of teachers' observations, rather than pupil comment.

While there appeared to be numerous pupil benefits in having GT, there were just as many disadvantages perceived. Such disadvantages included the boredom with having one teacher continuously (31% of responses); a class having an unfair advantage over other classes which had been allocated 'weak' teachers (13%); certain subjects being very badly taught when a teacher had no training in those subjects (11%); pupils not meeting and experiencing other teachers' teaching methods, ideas and beliefs (6%); and a negative bias for pupils where teachers neglected unfamiliar subjects for those in which they were trained (5%).

Other disadvantages mentioned by teachers for pupils in the GT programme included lack of concentration by pupils when they knew a teacher was not trained in the subjects being taught; if a teacher was absent for an extended period of time, whole classes suffered in at least half their subjects; pupils were not adequately prepared for the specialised approach to subjects offered in grades 9 and 10; integration of specialist subjects caused 'confusion' in pupils' minds, particularly when they were used to being taught subjects separately; pupils' academic levels were thought to fall; pupils became too familiar with one teacher and, therefore, felt 'shy' and 'inferior' with other teachers; and finally, they were bored with sitting continuously in the one classroom. For various reasons, teachers felt there was a likelihood that pupils could face real disadvantages in their academic careers through GT. This appeared to be the result of the difficulties of teachers who were expected to cope with more than they were trained for or were capable of.

Teachers' advantages with being involved in GT were also seen as predominantly personal. Teachers had opportunities to get to know pupils better through developing closer pupil/teacher relationships (29% of responses); teachers could more quickly identify and remedy pupil weaknesses and cater for pupils strengths (14%); teachers had more flexibility and freedom in planning and teaching lessons (14%);

they found it interesting teaching while at the same time, learning about subjects they were unfamiliar with (9%); classes were not interrupted by the forty minute lesson block (6%); and teachers found it 'easier' to correlate and integrate subjects (5%). Other advantages of GT for teachers included easier assessment of pupils work; the gaining of experience which would be invaluable to teachers' future careers; because lessons provided opportunities for more varied activities, teacher boredom through the unnecessary duplication of lessons in different subject areas was reduced; lesson preparation was simplified; classroom control was made easier; opportunities were available for encouraging pupils to work at a level and speed suited to their abilities; less time was wasted through movement around the school between classes; and inexperienced teachers were able to gain confidence in their abilities as a teacher. Advantages for teachers were many, therefore, providing the teacher had sufficient initiative and confidence to follow up opportunities GT presented. The most outstanding advantage was that of developing closer pupil/teacher relationships.

Whether the advantages outweighed the disadvantages of GT is another question, however. Disadvantages of GT noted for teachers included the extra work GT involved because of the excessive time spent in lesson preparation (30% of responses); subjects being poorly taught because teachers had not been trained in them (14%); boredom with the one class (13%); few opportunities for meeting or teaching pupils in higher grades (9%); and few opportunities seemed to be available for teacher advancement with no incentives being offered to teachers doing GT (8%). Other areas of complaint referring to the disadvantages of GT included lack of materials; insufficient background knowledge or experience which was considered an important prerequisite to teaching GT; personality clashes with individual pupils tended to become exaggerated; GT was seen to encourage teachers to resign; teachers felt they tended to become lazy with lesson preparation; the absence of a clearly defined syllabus led to feelings of insecurity; problems of pupil assessment were difficult to overcome; teachers believed they were considered to be of 'low status' in the eyes of specialist staff; and teachers were not able to develop expertise or experience in their specialist areas. The lack of training and experience of many of the teachers involved in GT were seen as main causes of discontent amongst the staff.

To summarise then, the main advantages of GT for pupils were the security GT provided in their transition from primary into secondary school, because they had to cope with fewer teachers and there was less confusion through movement from class to class every forty minutes. Pupils were better able to be observed more closely by teachers who were, therefore, able to assist pupils' progress and development both on a personal and at an academic level. Any problems or disadvantages faced by pupils on the other hand, were seen to stem from the inadequacies of teachers, due to the absence of training in the 'methods' of GT and a limited knowledge of some of the subjects they were required to teach. Associated with this was teachers' generally limited general knowledge, and lack of teaching experience. If a class was allocated to a teacher 'weak' in these areas, that class was considered to be at a greater academic disadvantage to parallel classes with better teachers.

Advantages for teachers were considerable - providing teachers had the experience and initiative to be able to develop greater flexibility in classroom organisation and teaching approaches. The opportunity for developing closer teacher/pupil relationships was considered an advantage for teachers as well as pupils. This was important for both groups in teaching/learning situations, as well as at a more personal level. Most of the disadvantages of GT listed by teachers in very general terms, stemmed from their lack of training and experience in teaching. Because of this, they felt insecure and inadequate as Generalist teachers, and as a result, they were required to spend an inordinate amount of time preparing for lessons on top of the other duties they were expected to perform as teachers - a task they found burdensome.

3.6 Problems of and Assistance provided for GT

Many teachers experienced problems with GT (Table 3.10) which could, perhaps, be attributed to lack of training and experience in a number of areas.

Table 3.10 Problems with GT, 1977

Problems	Respondents	
	N	%
Yes	57	59
No	24	25
Non-responses	15	16
Total	96	100

The types of problems experienced by Generalist teachers included excessive preparation (18% of responses); no guidance, programmes or syllabuses were available from headquarters (11%); trying to correlate materials between subject areas (8%); the effort required to maintain both pupils' and teachers' interest (6%); finding suitable materials (6%); trying to programme and timetable for GT (6%); inadequate assistance received from experienced school staff (5%); and trying to design multi-level work to suit the range of abilities within the one class. Other less commonly mentioned problems of teachers were those of conflicting aims between teachers on the nature of GT; assessment procedures; inadequate general knowledge and experience of many teachers; having to teach subjects teachers neither liked nor were interested in; and the pressures to keep to a pace set by other Generalist teachers. The main problem of teachers, therefore, appeared to be frustration which became evident at all levels in the school, from administrative levels to the classroom.

Problems were cross-tabulated with personal, professional and school organisational characteristics of GT. Of the twelve variables examined, none were significant. This shows that no one personal, professional or school organisational characteristic was likely to be more significant than any other in contributing to problems teachers faced with GT. GT, it appears, indiscriminately created problems for everyone. Many of the problems being faced by teachers were attributed to lack of the necessary training and experience, the general lack of guidance, aims, objectives, materials or programmes from the Department of Education and the inadequate assistance provided by other more experienced teachers in the schools.

The extent and nature of assistance provided to teachers for GT was also probed, the results of which are provided in Table 3.11. Over half the respondents indicated they had not received any assistance from any section of the Department of Education or headquarters personnel for GT. Of the 32% who had received help, most of this help derived from the Curriculum Unit and some from Secondary Division through Regional Secondary Inspectors. The nature of the assistance provided consisted mainly of advice or ideas on how to approach GT or how to solve immediate problems being faced by teachers. Materials assistance was also provided for a small proportion of teachers. Only 27% of the 37 respondents who answered this question said that such assistance was adequate.

Table 3.11 Nature of Assistance Provided for GT, 1977

Assistance		Respondents N	Respondents %
Received	Yes	31	32
	No	53	55
	Non-responses	12	13
	Total	96	100
Source of Assistance Received	Curriculum Unit	10	32
	Secondary Division/RSIs	3	10
	Other*	15	48
	Non-responses	3	10
	Total	31	100
Type of Assistance Received	Advice/ideas	12	39
	Materials	9	29
	Other**	4	13
	Non-responses	6	19
	Total	31	100

* Other sources of assistance came from fellow teachers.

** Other types of assistance included individual help and suggestions from teaching colleagues, in-service courses, staff meetings, informal discussion and through curriculum and inspectors newsletters.

The potential sources of assistance for Generalist teachers were quite varied, as Table 3.12 shows. The Curriculum Unit, Goroka Teachers' College and Subject Masters/Mistresses were obviously the most important sources for help in the minds of teachers.

Table 3.12 Possible Sources of Assistance for GT, 1977

Source	Respondents	
	N	%
Curriculum Unit	74	77
Goroka Teachers' College	59	61
Subject Masters/Mistresses	58	60
Secondary Division	30	31
Headmasters/Mistresses	27	28
Regional Secondary Inspectors	26	27
Provincial Education Officers	17	18

Teachers said the Curriculum Unit could provide assistance by writing and distributing a GT syllabus, programmes, materials, advice and ideas. Goroka Teachers' College could train appropriate teachers, provide ideas and materials, conduct in-service courses and offer demonstration lessons. Subject Masters and Mistresses could assist in correlating, programming, supervising, suggesting classroom approaches, providing worksheets and materials for teachers to draw upon, give demonstration lessons and conduct in-service courses. Secondary Division could assist by conducting in-service courses, establishing a 'specialist' GT department in schools with its own Subject Master or Mistress, defining the aims and objectives of GT and suggesting ways of achieving these aims and objectives. Headmasters and Mistresses could assist by supervising and guiding Generalist teachers and organising timetables. Regional Secondary Inspectors could assist by providing more thorough advice and ideas and organising inter-school exchanges of materials and ideas. Finally, Provincial Education Officers could assist by helping to specify the subjects which should be included in the GT programme.

Teachers generally considered the assistance they had been given was very inadequate, and they would have liked to have received much more. They were also able to be fairly specific about who should provide assistance and the form this assistance could take. The help teachers would have liked was of a type that most curriculum innovators would assume to be an integral part of any curriculum change package, however this was not the case here, given an almost total lack of planning for GT. Teachers were quickly able to identify the types of problems they experienced and also suggested ways in which such problems could be overcome. The implication was that, given the right assistance at the appropriate times, such problems might have been minimised. Had this occurred, GT might have been far more satisfying and less worrying for teachers at both professional and personal levels.

3.7 The Success of GT

The degree of success teachers said GT had experienced in schools provided some interesting figures (Table 3.13) and comments. A similar percentage of respondents thought GT had been successful in their school as the percentage who thought it had not been successful. The 'GT' such teachers were referring to, however, was not necessarily the same GT as that defined by the Department of Education, so this should be kept in mind when considering these figures.

Table 3.13 The Success of GT, 1977

Successful	Respondents	
	N	%
Yes	35	36
No	36	38
Non-responses	25	26
Total	96	100

The following comments made by teachers about the degree of success of GT in their schools further reveals why such results should not be accepted at face value. Many teachers thought of the success of GT not in terms of being a successful school programme, but more in terms of personal relationships or professional inadequacies.

GT was considered successful by teachers because pupils seemed to settle into secondary school more quickly than when the traditional teaching organisation was used (16% of responses); pupils' results seemed to be better (9%); GT was closely co-ordinated and regular meetings were held by staff (9%); better staff/pupil relationships were developed (7%); good teaching aids and materials were available for Generalist teachers to use (7%); and because Generalist teachers were trained (that is, primary trained) and experienced (7% of responses).

GT was considered successful by teachers for a number of other reasons. Teachers were able to discover the capabilities and needs of pupils; assistance was provided to Generalist teachers by senior staff; interests of pupils became 'wider' than the interests of those pupils who went through the sepcialist system; there seemed to have been a lower drop-out rate of pupils in the GT programme when compared with that of pupils being taught specialist subjects; there appeared to be 'less chaos' in movements around the school; pupils seemed to enjoy GT; and experienced expatriates were teaching in the programme. On the surface then, GT was successful where pupils did well and if GT was in the hands of capable and experienced teachers. The programme also needed to be well co-ordinated if it was to be a success.

Turning to the reasons why teachers considered GT had not been successful in their schools, a different framework of criteria provided the yardstick for measurement. GT was not considered successful in school by 38% of respondents. The reasons for GT not being successful were because inexperienced teachers were teaching it (11%); no programmes were available for teachers to refer to (9%); there was no full-time co-ordinator of GT at schools (9%); and teachers were teaching subjects for which they were not trained. Other less common reasons were the negative attitudes of specialist staff toward Generalist teachers and the GT programme worked against GT; difficulties were experienced trying to keep teachers working at the same pace; lack of support from Subject Masters and Mistresses; teachers were teaching GT against their will; no headquarters assistance or advice was offered to Generalist teachers; too much work was expected of teachers; unfamiliarity with possible GT classroom approaches such as the thematic approach; difficulties experienced trying to co-ordinate a variety of subjects; and not enough forward planning was conducted by the Department of Education prior to the introduction of GT.

What seems to emerge from these largely unrelated reasons for the success of GT is that aspects of GT appeared to have been successful, rather than the programme as a whole being either a total success or a total failure. The most important successful aspects of GT that Generalist teachers noted were the benefits and advantages accruing to pupils. These benefits were predominantly personal, however, academic advantages were also mentioned. The success of GT when considered as a total programme was attributed largely to good co-ordination, regular meetings and assistance from other school staff. Allied to this was the potential which teachers had for developing their own ideas (provided they had the initiative), because flexibility and freedom of programming were 'built in' to the organisational characteristics of GT.

The reasons why GT had not been considered successful by so many teachers could be traced to their general lack of experience and to lack of relevant training necessary for coping with such a course. Too much was expected of teachers who had too few skills to meet these requirements. As a result, teachers began to feel insecure and unsure of their abilities to cope with teaching. Had the necessary assistance been offered at the appropriate time, teachers felt that many of these problems could have been avoided or at least minimised. It is also significant to note, however, that as a programme, no real criticisms had been levelled at GT, so presumably teachers accepted the basic philosophy (or at least what they believed it to be) behind the concept of GT.

Such an hypothesis finds a certain degree of support because half the Generalist teachers indicated a willingness to continue with GT, as Table 3.14 shows. The reasons why 50% of teachers were interested in continuing GT were because of the personal benefits GT provided for pupils (46% of responses); the personal benefits gained by teachers (17%); the ease and flexibility with which lessons could be organised (8%); and the opportunities and interest GT provided through teaching new subjects. Two other reasons were that the same teaching materials could be used to correlate lessons between subjects with the same class, and secondly, because teachers were now used to GT and were quite happy to continue teaching it.

Table 3.14 Proportion of Generalist Teachers Willing to Continue GT, 1977

Continue GT	Respondents N	Respondents %
Yes	48	50
No	40	42
Non-responses	8	8
Total	96	100

Those teachers not wanting to continue GT gave the following reasons: lack of training, experience or confidence (20% of responses); GT was far too time-consuming and demanding for many teachers (20%); teachers preferred teaching their specialist subjects (15%); they found GT very boring (10%); and that there existed too many disadvantages for pupils (5%). A range of other less common reasons for not continuing GT existed: lack of interest in the programme; teachers preferred to have an opportunity for becoming involved with other classes and pupils; teachers felt that they were not really teaching 'GT' even though they were called Generalist teachers. Difficulties faced through lack of assistance and guidance; the feeling that they were becoming 'jacks-of-all-trades' because too much was being expected of them, and they were attempting too much with seemingly little success in anything; GT had no 'place' in secondary schools; and teachers were unsure about whether or not they were teaching the 'correct' work to pupils.

Another perspective on the results of the success of GT, and whether or not teachers would continue teaching in the programme was found when these data were cross-tabulated with teachers' personal and professional characteristics. Table 3.15 presents the phi-coefficient results Nationality is again an important characteristic. Consistent with previous results, fewer national teachers and more expatriate teachers were prepared to continue GT (χ^2=4.92, df=1, p=.05, ϕ=.24). Such an attitude was consistent with personal and professional characteristics of those national officers involved with GT, already discussed in the first section of this chapter.

When examining the effect the number of subjects a teacher was trained in had on whether that teacher would continue GT, the pattern showed that a significantly higher proportion of teachers who had been trained in one to three subjects were not prepared to continue with GT (χ^2=5.56, df=1, p=.02, ϕ=.24). Similarly, a significant difference existed between whether teachers considered GT successful and whether problems had been experienced with GT (χ^2=12.79, df=1, p=.001, ϕ=.45). A very strong correlation was noted between problems faced and the fact that GT had been considered a failure by teachers.

To sum up then, equal numbers of teachers thought GT had been either successful or unsuccessful in their school. The criteria for this opinion seemed to be two-fold. The level of achievement of pupils was first. If pupils had done well, according to teachers, and if good teacher/pupil rapport developed, then GT was considered successful.

Table 3.15 Phi-coefficient Results on the Success and/or Failure of GT, 1977

Characteristics		GT Successful	Continue GT
Personal	Age	0	.20
	Sex	0	.10
	Nationality	0	.24*
Professional	Position	.17	.14
	Years training	0	.10
	Subjects trained in	.14	.24*
	Subjects teaching	0	.10
	Terms GT	.14	.20
School	GT programmes used	0	0
	Organisation of GT	.10	0
	Problems with GT	.45*	.14
	Continue GT	.20	-

* χ^2 significance at .05 or greater.

The reasons for GT not being as successful as it could or should have been were determined mainly by the nature of a teacher's training and experience which were often inappropriate for what GT expected of them. Similarly, fairly equal proportions of those teachers currently involved with GT were prepared to either continue or cease involvement in the programme. Those teachers who wanted to continue GT attributed their desire mainly to the benefits gained by pupils and teachers - from personal, academic and organisational points of view. Again lack of appropriate training and experience were the main reasons for teachers wanting to opt out of GT. Lack of training and experience led to feelings of insecurity within teachers, and as a result, pupils were thought to suffer.

3.8 Other Comments

In the final part of the questionnaire, teachers were invited to make any comments about GT they wished. While most comments tended to reinforce opinions already aired in the main body of the questionnaire, they deserve brief mention here. These comments tended to fall into two broad categories - criticisms and praise for GT, and suggestions for the future development of GT.

Criticisms and Praise

Teachers felt that GT was put into the schools too quickly, with insufficient preparation - no stated philosophy, no teacher preparation, no materials or no syllabuses. No one had explained to teachers what GT was and they felt that many of the problems that had been faced were because of this. Despite this criticism, other teachers felt that GT had been a good introduction to secondary school for pupils. GT had advantages for both pupils and teachers and could, therefore, be extremely satisfying and rewarding. Teachers also felt that more assistance should be given to teachers. Assistance was needed to reinforce the work they were doing, and to support the already demonstrated advantages of GT. Teachers were inclined to accept the idea of GT, but not the manner in which it was introduced to them, or the lack of departmental guidance and support.

Comments and Suggestions

For some teachers, GT was ineffective, and they believed that it would remain so until something positive was done by the Department of Education. First of all, the department needed to decide what was trying to be achieved through GT. At the time of the survey, teachers said that GT was a name and little more than that. Too much was being expected of schools and teachers without providing support for them. Teachers felt that there had been no real commitment to GT by anyone, and as a result, GT could fail - not because it had no potential, but because of lack of direction and the seemingly negative attitudes held by many people toward GT.

If GT had been properly implemented in the first place, and if teachers had been qualified to teach it, teachers maintained that GT could have been highly successful. For GT to be successful in the future, teacher training and assistance were essential, both from within and outside schools. Within schools, experienced teachers should be teaching GT. A high degree of co-operation and good organisation amongst staff were also important, with participation by non-Generalist staff in schools desirable.

GT was considered to be desirable for students because often specialist teaching was little more than a meaningless ritual of note taking. GT had to offer what teachers thought students needed for life outside school. At present, however, teachers felt that this aim was not being achieved. There were many and varied problems being faced, and consequently teachers felt they were doing more harm than good to pupils. Until something positive was done by the Department of Education, it was suggested that teachers should remain in specialist subject teaching.

Teachers believed that there existed a need to clarify the aims of secondary school education in general, and the aims, objectives and standards in relation to GT, in particular. Once the aims for GT had been defined, a programme of activities could be worked out. Teachers felt that it was one thing to ask individual teachers and schools to formulate a school programme for GT, but it was another thing entirely to expect them to formulate the aims and objectives for GT as a whole. Teachers believed that it was impossible for so many teachers to work in the one direction, let alone the right direction, without some guidance. Special training classes and in-service programmes were suggested for GT. Expanding Goroka Teachers' College primary - secondary teachers conversion course, and more co-operation between schools in organising in-service programmes were also seen as desirable moves.

Teachers thought that some sort of written programme was definitely required for GT. Some teachers wanted to see a fully integrated programme designed by the Curriculum Unit. Some suggested that the programme should be designed by the Headmaster or Mistress and teachers in the school. Others suggested that materials (such as textbooks) should be provided for pupils so that teachers could determine the subject linkages and combinations of subjects for their classes. Alternatively, separate subject categories should be kept to ensure that content and concepts were adequately covered, with a project day timetabled into each week where pupils were required to practically demonstrate the skills learned in subject lessons.

Teachers would have liked to have seen the GT Co-ordinator given an equal role and status to that of a Subject Master or Mistress. They believed that such a move would lend some 'respectability' to GT. It was strongly felt that recent graduates should not be forced into GT, and that a couple of years teaching experience should be mandatory for such teachers.

Such comments and suggestions served to reinforce many of the attitudes and suggestions that came through questionnaire results. At this stage, a brief summary of the main points discussed in this chapter needs to be made.

3.9 School Practice 1: Recapitulation

Generalist teachers tended to be predominantly young, inexperienced national officers with a disproportionate number of those teachers being female. General opinion indicated that experienced teachers rather than recent graduates should be recruited into GT. Many teachers were teaching subjects other than those they were trained for. Teachers were confused about what GT was and what it was aiming to do.

The type of organisation of GT in schools tended to conform to the Department of Education organisational directive as described in Secondary Circular Letter 1/76, however few schools seemed to have developed 'integrated' approaches to teaching in their lessons. GT was seen to have numerous advantages and disadvantages for both pupils and teachers, however it was difficult to determine whether one outweighed the other. Problems were common to the majority of Generalist teachers and very little adequate assistance was received for helping overcome problems.

Teachers specified a number of organisations and groups who they believed could provide relevant assistance and they readily detailed the preferred nature of aid. Respondents were equally divided about how successful GT had been, but no absolute statements were possible, because Generalist teachers varied markedly in the criteria used to determine the degree or success of the programme.

The most outstanding feature of the results was that headquarters confusion and uncertainty was reflected in schools. Teachers were uncertain about their role in the programme - particularly when they could not precisely define GT or its aims. Many of the doubts held by Generalist teachers about GT, as well as doubts about their own abilities as teachers in such a programme could be attributed to their limited general knowledge and general inexperience as teachers. Certainly more senior and experienced school staff could have been invaluable in assisting Generalist teachers. The implementation of GT left much of the responsibility to teachers - some of whom were able to cope, many of whom could not.

The questionnaire survey showed that the practice of GT left much to be desired. So far, the results presented on the policy and practice of GT have revealed that the procedures used to plan and implement GT were inadequate and inappropriate. The next chapter will look at the issues raised in Chapter 3 in greater detail, by presenting and analysing data from the five case study schools.

Chapter Four

PRACTICE II: SCHOOL CASE STUDIES

The second part of the data about the practice of GT in schools is presented in this chapter. Details explaining how and why case study schools were selected were outlined in Chapter 1.2, however, a recapitulation of the selection criteria is useful at this stage. Schools were selected on the basis of:

1. School A: no GT at all
   School B: GT rated as highly successful by teachers
   School C: GT rated as a failure by teachers
2. School D: a thematic approach used in classroom teaching
   School E: one teacher teaching most or all subjects to the one class.

A sixth school was selected on the basis of correlation of subject areas, but the case study was not completed because the school was quarantined.

Data on the practice of case study schools was collected from three sources: first, interviews of personnel connected with GT in the selected schools; second, examining individual school files and inspectors files for the Highlands Region (Regional Secondary Inspector's Reports 1977a) and High School Reports for individual schools (File numbers will not be given because this would breach the promise of anonymity made to those schools); and third, through recording lessons taught by teachers in the GT programme. Analysis of data from the second and third sources proved to be of minor importance compared to the data obtained through interviewing. For example, written comments made by the Regional Secondary Inspectors between 1975 and 1977 were noted, but they tended to be rather general statements which added little to the understanding of the practice of GT in case study schools:

> School C: Successful Generalist teaching scheme will come about with more regular In-Service work and closer co-ordination of individual efforts and programming. Recommendations on generalist teaching was discussed at some length with the co-ordinator on areas of team preparation, planning, setting tests and assessment procedures. Meetings for these teachers should be held once a week and not once a term (Regional Secondary Inspector's High School Report, July 2, 1976 [sic]).

> School D: The school has carried generalist teaching into Form II [grade 8] this year and full credit must go to the enthusiastic staff who introduced the concept so effectively

> last year. The long session I had with the generalist teachers proved valuable and interesting (Regional Secondary Inspector's High School Report, February 18, 1976).

> School E: The school's Generalist Teaching Programme is firmly established and well organised (Regional Secondary Inspector's High School Report, May 10, 1977).

Similarly, school files were not a very profitable source of information about GT - minutes of GT meetings referred to day to day items such as locking office doors, the quantity of duplicating material available, inspection procedures, pupil assessment and so on (School C: Generalist Teachers Meeting, July 30, 1977 and September 29, 1977). Schools C and D included copies of teaching programmes and in-service meeting agendas and minutes. School D was the only school to have outlined what GT meant for that school and what teachers aimed to do with regard to GT. Where appropriate, file material has been incorporated into the following discussion. However, the main source of data for school case studies derive from interviews conducted with teachers in each of the schools.

Chapter 4 presents the essence of this data which, for ease of reading will be combined under topic headings rather than presented school by school. This approach will eliminate repetition of many comments and attitudes about GT common to each school. However, to give this data more meaning, and as an aid to understanding how and why GT existed in its various forms in schools, a summary of the essential features of GT on a school by school basis will be given first. Following the school case study summary, data from each school will be combined into six sections: first, school, teacher and GT characteristics; second, the definitions and aims of GT; third, the advantages, disadvantages and problems associated with GT; fourth, the success of GT; fifth, staff reactions to GT; and finally, the future of GT in schools.

4.1 Case Study Summaries

School A

School A had not implemented GT at all. It was a small, Type A school run by a mission agency in a rural area of the highlands. Staff at the school were predominantly highly experienced expatriates. According to the Headmistress, GT had not been implemented in School A because of a staff shortage, and the related difficulties of trying to timetable GT into the normal school routine. The Headmistress, a very forceful person, maintained that even if these problems had not been faced, it was still highly unlikely that GT would have been implemented at that school. This was not attributed to the inadequacies of staff, but more to the the Headmistress' opinion that staff preferred to teach their specialist subjects, and that pupils benefitted more by having a variety of teachers. Given the lack of turnover of staff at School A there could have been resistance to any form of change, but evidence to support this opinion was not suggested during the interview with the Headmistress.

School B

The questionnaire survey showed that in May-June 1977 GT had been considered successful by staff at School B, which was a larger Type B mission boarding school located in a rural area of the highlands. GT was co-ordinated by a young expatriate female and there were two other national teachers in the programme. The case study showed that School B was fulfilling the organisational, but not the curriculum requirements of GT. Attempts had been made to develop an integrated programme, but staff found it too confusing and difficult to teach. Specialist subject teaching dominated, with lessons planned on a team basis.

The national teachers (one of whom was primary trained) were generally happy with GT, however the GT Co-ordinator experienced difficulties trying to co-ordinate the programme and was often frustrated by the 'unreliability' of her staff who were unable to have work completed on time. One of the previous Generalist teachers, a national woman, had resigned earlier in the year, said the GT Co-ordinator, because of her inability to cope with GT.

The GT Co-ordinator was not very experienced in co-ordinating a group of teachers, particularly in a programme like GT. She apparently did not receive strong support from her staff, the rest of the school, Goroka Teachers' College or education headquarters. As a result, GT was no different from the usual subject specialist style of teaching. No criterion for claiming success was common to all teachers, and 'success' seemed to depend on personal perceptions and experiences with GT.

School C

School C, an administration boarding school in an urban area, was selected because the questionnaire survey showed GT to be a failure. It was a large, well-established Type D school. In the survey, staff thought GT had been a failure at this school for a variety of reasons, stemming largely from inadequate preparation of and guidance for teachers by the Department of Education.

There were three GT staff, one of whom was the GT Co-ordinator. Co-ordinating GT was an additional duty for which no extra time was allocated, and there had been two co-ordinators during the course of the year. Only one teacher had offered to teach in the GT programme, the others had been coerced into it because previous GT staff had adamantly refused to continue in the programme. Current staff were recent Goroka Teachers' College graduates, while the original GT Co-ordinator was also a Goroka graduate with three years previous teaching experience.

'Generalist Teaching' at School C meant that one teacher taught three subjects to the one class. No common core of subjects was selected and teachers taught their two specialist subjects and any one other subject. The minimal organisational requirement for GT was met at School C - of the five grade 7 classes, three were selected at random and organised to meet headquarters demands. The other classes, of which there were two, followed the normal one teacher/one subject style of teaching.

An air of confusion and uncertainty surrounded the entire GT programme except for one term during 1977, when all the staff at the school, along with other schools, participated in an in-service session designed to produce a unit of work for GT using a thematic approach. All staff were enthusiastic about this unit and agreed that in practice, it had been highly successful. The Headmaster of School C maintained, however, that the school could not afford to continue doing this on a regular basis because GT was only one of the many areas requiring attention from staff.

Staff were highly critical of the Department of Education for failing to give the necessary guidance and support to help them cope with GT. Without support, GT Co-ordinators were lost and uncertain about what to do and what was expected of them. The Headmaster was a strong leader who could have been invaluable in guiding the direction of GT, but while he recognised the worth of GT in principle, he was sceptical of its chances for succeeding in provincial high schools because of the nature of the staff and because of the means used by the Department of Education to implement it. The resultant negative attitudes of the Headmaster, coupled with the negative attitudes of previous GT staff, were certainly not conducive to developing an atmosphere favourable to the success of GT at School C.

School D

The thematic approach to GT was said to be used by teachers at School D, which conformed completely to the requirements of Secondary Circular Letter 1/76. This school was very similar in its charateristics to School C, being a Type D administration school located in an urban area of the highlands and which catered for boarding pupils. By the time the case study was being conducted at this school, however, there had been three GT Co-ordinators during the course of 1977, and thematic teaching was no longer the approach used. The latter situation was due to the third co-ordinator being new to the position and unsure of what GT was and how to organise the programme.

There were five GT staff at the school, all of whom were national officers. Three were primary trained with some previous teaching experience, the two were recent secondary trained graduates (one from Goroka Teachers' College and the other from the University of Papua New Guinea). All teachers felt more secure teaching subjects in a specialist way, even though they were unfamiliar with some of the subject areas they were required to teach. Only one of the GT staff (the University of Papua New Guinea graduate) strongly disliked and felt insecure in GT. This teacher had threatened to resign. Most staff, however, were quite satisfied teaching in the programme. Opposition to GT from other staff members was strong on the grounds that GT was causing standards to fall and because pupils were entering grade 9 without necessary skills in certain areas. This opposition, as well as pressure from the Regional Secondary Inspector in the province to maintain academic standards, meant that GT was dropped from grade 8 and only continued with grade 7 classes.

Thematic teaching had been considered highly successful at School D, particularly in the early years of GT at that school, when GT staff were experienced expatriate teachers. Pupils were seen to be far more alert, showed more initiative and interest, and developed more self-confidence through this programme. Gradually, however, with constant changes in staff and pressures from education headquarters, through the Regional Secondary Inspector, the thematic approach was discontinued and specialist subject teaching was once more dominant.

The originator of GT at School D (the current Deputy Headmaster) had sufficient initiative and experience to be able to devise aims and objectives for the GT programme in the school, despite the lack of guidance from education headquarters. The expatriate teachers also had enough experience to be able to follow through and successfully achieve these aims. But, when a new GT Co-ordinator and staff, without the appropriate experience took charge of the programme, the thematic approach was soon replaced by a style of teaching more familiar to teachers.

School E

School E was chosen because GT was organised with one teacher taking one class for most subjects. By the time the case study was conducted at the school, only three subjects were taught by the one teacher. Originally five subjects were taught, however teachers found this load too great, so two were dropped. School E was only a small Type A school located in a rural area. It was an administration school catering for day pupils only.

GT was being organised and taught by two expatriate teachers who had some teaching experience before arriving in PNG. They were teaching in the Generalist programme voluntarily, and because there were only two classes, co-ordination was not difficult. The teachers co-operated with each other very closely. Other staff at the school assisted the Generalist teachers in subjects with which they were not familiar.

Lessons were taught in specialist subject areas. The teachers said they tried to correlate where appropriate. They had thought about integrating subjects more fully following an in-service session on GT with a number of other schools, however they soon abandoned this idea because they found it too difficult. Thus School E was also conforming to the organisational rather than the curriculum part of Secondary Circular Letter 1/76. The Headmaster of the school believed that GT meant an integrated teaching programme, however because of the way his teachers had interpreted GT, he too defined it in organisational terms.

Data for the rest of this chapter derive from interviews conducted with teachers in each of the selected schools. Data from each school will now be presented under the six topic headings which were outlined at the beginning of this chapter.

4.2 School, Teacher and GT Characteristics

Case study schools revealed a number of similarities and differences in the characteristics of schools, the type of teacher teaching GT and the way GT had been organised in the school. Table 4.1 provides a summary of the key characteristics of case study schools

Table 4.1 Summary of Case Study School Characteristics

Characteristics			Schools				
			A	B	C	D	E
SCHOOL	Size	Type A	x				x
		Type B		x			
		Type C					
		Type D			x	x	
	Agency	Mission	x	x			
		Administration			x	x	x
	Location	Urban			x	x	
		Rural	x	x			x
TEACHERS	Nationality of Generalist teachers	PNG only				x	
		Expat. only	na*				x
		Both		x	x		
	Sex of Generalist teachers	Male only					
		Female only	na				x
		Both M/F		x	x	x	
	GT Co-ordinator	Experienced	na		x	x	x
		Recent graduate		x	x		
	Sex of GT Co-ordinator	Male	na		x		
		Female		x		x	x
GT IN THE SCHOOL	Grades with GT	Grade 7	na	x	x	x	x
		Grade 8					
	Number of subjects taught in GT	3		x	x		x
		4	na				
		5				x	
	Classroom Approach	Specialist	x	x	x	x	x
		Correlation	x	x	x		x
		Thematic			x	x	

* na = Not applicable

In general, the case study schools are similar in their characteristics to those trends outlined in the previous chapter. The case study schools were representative of the general characteristics of schools (except for all of the schools being located in the highlands), and the teachers in case study schools also held similar characteristics to those of the sample population. That is, teachers were mainly young, female and had limited teaching experience prior to 1977. Co-ordinators of GT usually had some previous teaching experience but only two had previous course administrative experience on assuming responsibility for GT. One GT Co-ordinator commented that,

> when I first came to [School B] in 1976, I had been in the country a grand total of four months, and I really had no idea who to go to for advice and assistance on GT, so I muddled along for a while, trying to get help from Senior Subject Masters and those sorts of people ... The Teachers' College ... wouldn't do anything about it ... They'd just say things that didn't mean anything. It was very discouraging. They wouldn't give any solid help (School B GCO: Int).*

There were no set rules for allocating classes, teachers or subjects for the GT programme in schools. Directions to schools referred 'to the minimum number of periods that must be taken by one teacher. Subjects are not defined. It doesn't matter which subjects you do ... that was laid down for grade seven and optional for grade eight' (School E HM: Int).

At School C there were five grade 7 classes, but only three were involved in GT. The teachers were told to teach their specialist subjects and one other subject to their GT class. The roll class allocated to teachers became their Generalist Teaching class as well (School C GCO2: Int). Only three classes became Generalist classes because other teachers refused to teach as Generalist teachers (School C HM: Int). The subjects chosen for inclusion in the Generalist programme were based on teachers' specialities in School B - English, Mathematics and Science - which the GT Co-ordinator considered an unsatisfactory arrangement. She would have preferred combining related Arts or Science subjects, with English 'taught as a specialist subject' (School B GCO: Int).

Each school, except for School A, had followed the organisational requirement of Secondary Circular Letter 1/76. That is, one teacher had the same class for at least three subjects a week. In School D, teachers had the same class for five lessons a week. Generalist teachers in Schools B and E had more than the minimum three subject requirement prior to 1977, however these extra lessons demanded too much of teachers and were too difficult to co-ordinate. GT had been implemented in grade 7 in all schools (except School A). The only school which had attempted GT in grade 8 was School D, but this was abandoned at the beginning of 1977 for reasons discussed in Chapter 4.5 and 4.6.

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* The following abbreviations will be used to cite comments made by school personnel:

HM, DHM - Headmaster, Deputy Headmaster/Mistress
GCO - GT Co-ordinator
GTr - Generalist teacher

The numbers 1, 2, 3 and 4 after any abbreviation have been used to distinguish between comments made by different teachers within the same school.

Int - Interview
Qre - Questionnaire

At the time the case studies were being conducted, no schools were practising integration of subjects, although respondents to the questionnaire from Schools B and E said they were, and respondents from Schools C and D said they were using a thematic approach. Even though GT in the Department of Education organisational sense did not exist in School A, a form of GT was nonetheless practised, according to the Headmistress. 'GT in a sense is here, but not done by the same teacher for the same class ... It is a sort of relative Generalist approach I suppose you could call it' (School A HM:Int).

School B had attempted to develop an integrated programme, but teachers found it far too difficult and confusing to practice in a classroom situation, so it was abondoned and teachers returned to a specialist approach. However, where appropriate, the GT Co-ordinator maintained that reference was made to related subjects, where teachers might be 'using problems in Science for Math, and using situations in discussion in Science for English' (School B GCO:Int).

The teachers of School C developed a thematic approach to GT through an in-service session at their school. Prior to the in-service workshop, teachers had been teaching subjects separately. During the workshop, teachers from each department within the school contributed a unit of work designed for a month and built around a single theme. All staff considered this approach highly successful from both teaching and learning points of view, however the Headmaster argued that while it most certainly was a fruitful exercise, it would not be possible to repeat the workshop. 'We put the whole resources of the school behind it, and I can't afford to keep doing that' (School C HM: Int). Despite the success of the thematic approach, it 'wasn't implemented long enough for the teachers to learn how to do it' (School C GCO1:Int). GT soon reverted to specialist teaching at School C. Teachers did comment that they related between subjects, nonetheless, but this was refuted by the GT Co-ordinator, who said,

> they don't relate between subjects ... They just follow the syllabus [and they follow it] too closely... They should be able to add extra bits and relate to other subject areas, and they don't do that (School C GCO2:Int).

Staff were confused, and one teacher said, 'I'm not really sure what is the difference between thematical and the other approach that other teachers use' (School C GTr1:Int).

Teachers at School D, on the other hand, had thought more carefully about GT, particularly in the early stages of the programme. In-service workshops on GT and thematic teaching had been conducted, as well as workshops where teachers defined how they thought GT could and should be approached. The in-service workshops had proved very productive, for in co-operation with a number of other schools, thematic programmes for teachers were outlined in 1976. These units of work were not considered prescriptive by teachers and they allowed considerable individual freedom for experimentation.

Thematic teaching at School D was begun at a time when all the Generalist staff were expatriates who had transferred from PNG primary schools to the secondary system. These teachers had a good general education and teaching experience before teaching in the GT programme. When GT was later passed on to national staff, these elements (good general education and training), essential to the success of GT were lacking (School D DHM:Int). National teachers managed to cope with the lack of prescription in the first two terms of 1977 when GT was organised by highly motivated expatriate teachers. However, when the internal staff changes occurred in the school, the GT Co-ordinator's position passed into the hand of a national teacher, who, while also highly motivated, did not have the necessary expertise or experience to continue organising and using the thematic approach in the same way (School D DHM:Int). As a result, the classroom approach returned to specialist subject teaching.

Teachers admitted that they found thematic teaching 'confusing' and they preferred specialist teaching (School D GTr1:Int). One of the teacher's reasons for preferring specialist teaching was that,

> the planning [for the thematic approach] wasn't well done, so I couldn't follow it up ... I tried to make my own plans and relate things together, but I found it a bit too hard. At the moment, teaching subjects separately, I find it a bit easier (School D GTr1:Int).

During the third term, detailed lesson plans were prepared in teachers' specialist areas and duplicated for other teachers in the Generalist programme to use. This meant more security for teachers, despite their lack of training in at least three of the subjects they were required to teach.

Teachers at School E, on the other hand, had thought about a thematic approach for GT, and had attended an in-service course on using the thematic approach organised by another school. The teachers - both expatriate - considered such an approach far too confusing and difficult and decided to keep to a specialist style of teaching (School E GCO:Int). One of the reasons for deciding against a thematic approach was that,

> if we think the kids are not understanding a Maths topic, we can spend more time on it next week, or we can have a week of revision. With thematic approach you can't do that. You are very inhibited. You can't branch out, you can't diverge (School E GTr:Int).

So teachers wrote 'separate programmes for separate subjects' based on specialist subject syllabuses (School E GTr:Int). One generalist teacher commented that,

> I haven't had the experience. I've only been ... eight months in the country. I haven't had time yet to go through the syllabus and really think about it enough to go through and make up separate programmes (School E GTr:Int).

The experience of these schools is interesting. Obviously, being well-educated, trained and experienced was useful if teachers were to attempt to go beyond the minimal organisational requirements of the GT programme to implement an integrated or thematic approach in the classroom. Where a detailed lesson programme was able to be written for teachers, some measure of success was experienced, but this could only be followed through where the GT Co-ordinator was a highly experienced and motivated teacher as well. Where programmes allowed for individual freedom, some teachers became confused and unsure of what to do and how to do it. Between Schools A and E, a range of classroom approaches were utilised - from no GT in one school, to a school where GT had been attempted using a thematic approach, to a school where a thematic approach had been 'thought about' but not followed through, to a one-month experiment in another school which proved too demanding to even consider doing again, to that where one school was able to teach an integrated course on a continuing basis. It is also interesting to note, however, that all schools had returned to specialist subject teaching by the end of 1977.

4.3 Definitions and Aims of GT

All the staff interviewed in each school were asked to define GT and outline what they considered the aims of the programme were. The Head and Deputy Headmasters and Mistresses were also asked why they thought GT had been introduced to schools, because their answers to this question may have influenced the definition and aims of GT for their schools.

The heads of Schools C, D and E suggested some possible reasons for GT being introduced, but none of the respondents were very certain about the rationale for GT. The headmaster of one school thought that GT 'was based on the Five Year Plan which came out in 1974' (School C HM:Int). The Headmaster maintained the Plan suggested that grades 7 and 8 be incorporated into the primary system - hence a 'generalist' approach would be used. Alternatively, GT was thought to have been introduced to alleviate staff shortages and help orientate pupils into life in secondary school (School C DHM:Int). The Deputy Headmaster of School D suggested that GT was introduced as part of the many changes in direction and philosophy of education in the country at the time of Independence, when it was suggested that grades 7 and 8 be transferred to community schools as part of their responsibility. He added that this would facilitate an emphasis on more 'village-oriented things' and particularly agriculture in the schools' curricula (School D DHM:Int). It was this belief that subsequently guided the aims of GT in School D. But, the Deputy Headmaster continued,

> it was possibly a very mundane reason. Possibly to do with classrooms or economics or localisation of the teaching department. What I would like to feel is that somebody came in and saw grade sevens' being subjected to specialist teachers at a level which they [grade seven pupils] didn't comprehend, and said 'This can't go on' (School D DHM:Int).

The administrators of School E thought that GT was introduced to help pupils acquire an appreciation of a number of subject areas (School E HM: Int) and to ease the transition of pupils from primary into the secondary school system (School D HM:Int; DHM:Int).

The reasons given by heads of schools did touch on some of the reasons for the introduction of GT outlined by headquarters personnel in Chapter 2.4, however none of the respondents were really sure about the reasons behind the initial introduction of GT. One Deputy Headmaster said the idea 'was to let every school do what it wanted to do until some consensus was reached' (School D DHM:Int).

For each school, the first definition of GT given by respondents tended to be organisational and corresponded to the organisational requirement of Secondary Circular Letter 1/76. Some respondents thought that GT might mean more than mere organisation of classes, and used words like 'thematic' and 'correlation' to widen their definitions of GT (School C GTr1, GTr2, GTr3:Int; School E HM:Int). Most respondents admitted uncertainty:

> Many people have their own interpretations of it (School E HM:Int).
>
> It's what we intend it to mean. I don't think it's a definite thing (School D DHM:Int).
>
> To be honest, I still don't know. Everyone seems to be floundering around trying to find out what it's all about (School C GCO2:Int).
>
> I haven't got a personal definition and I've been teaching Generalist for two years (School D GCO:Int).
>
> To be honest, I still don't know what Generalist means. The whole thing is confusing (School D GTr4:Int).
>
> I don't really know. It is a very vague, wishy-washy area (School E GCO:Int).

To one teacher, GT meant 'teaching subjects you are not trained in' (School C GTr2:Int), and to another it meant 'teaching all the subjects that are not your specialist subjects' (School C GTr3:Qre). None of the respondents were able to define clearly what GT meant. They were able to define how GT was to be organised or how they thought it should be taught in the classroom. They could define the form of GT but not the substance. One teacher commented that 'I'm not really sure what is the difference between thematical and the other approach that other teachers use' (School C GTr1:Int). This teacher had used both approaches in the classroom prior to this interview. The Headmaster of School C, for example, said that GT could be 'interpreted in different ways', but was unable to define what could be 'interpreted'.

Because the Department of Education had not provided teachers with a single all encompassing definition of GT, GT was defined in light of teachers' interpretation of the term, and their experiences in the programme. This is made even more confusing however, when a number of teachers and administrative staff within the one school all held different definitions of what they believed GT to be. Such a situation also became apparent when teachers outlined their aims for GT.

While individual differences in aims did occur, most aims could be considered pupil-centred because they tended to revolve around the personal/academic advantages GT held for pupils. There were three aims GT should have, said one Headmaster:

> It's main aim is to orientate the children to the environment of a high school. To give them [the pupils] the idea that we are aware of them as people who need guidance and personal development. And ... we ... aim to get [academic] standards (School C HM:Int).

During the course of the interviews, it became obvious that the aims given by many teachers were individually formulated, and were often made up in the interview. Most teachers had to stop and think before they were able to answer the question about aims. The GT Co-ordinators of School C and D admitted they had no aims for the Generalist course in their schools at that time - School D because of the GT Co-ordinator's recent appointment to that position (School D GCO:Int), and School C because teachers had full teaching loads and were apparently unable to find time to meet to discuss the formulation of aims for GT (School C GCO1:Int).

All respondents implicitly agreed that the aims for GT should be pupil centred. GT should provide opportunities for pupils to further develop literacy and numeracy skills; to assist pupils with personal and academic problems; to help pupils adjust to the transition from primary to secondary school; and to prepare potential school leavers for life in the village. The Headmistress of School A stressed the importance of the primary/secondary transition time for pupils, because 'now the children are more children than they were in years past'.

Teachers' aims also changed between responding to the questionnaire in May-June and being interviewed in September. When interviewed, one teacher at School C, for example, stated that she followed specialist subject syllabus aims, while at the same time, she said that she aimed to prepare pupils for life in the village (School C GTr1:Int). The same teacher earlier on in the year, however, thought GT aimed to interest teachers in teaching subjects that no specialist teacher was available for in the school (School C GTr1:Qre). Clearly there was confusion, even within the minds of the same teachers.

Teachers would have preferred to be given an aim towards which they could work. School C, for example, had 'no real aims as such. All we do is carry out instructions from Konedobu' (School C DHM:Int). Provision of a general aim would have helped to provide direction. 'For instance , if we had to train the kids to go back and work in the villages, then that is something we should aim for' (School C GCO2: Int). The Deputy Headmaster of School D was unable to recall any specific direction the school had received from education headquarters concerning GT, and he also maintained that none were needed, because 'I knew what I was going for, and I was enthusiastic about going for it' (School D DHM:Int). Nonetheless, some departmental direction would have been useful at in-service meetings, for example, where many conflicting ideas and definitions for GT were presented and argued. Generally speaking, then, there was a lot of confusion about the aims for GT which, no doubt, stemmed from the problems a number of respondents had in defining GT. However, aims were heavily weighed towards pupils and what GT could provide for them, both personally and academically.

4.4 Advantages, Disadvantages and Problems with GT

A variety of advantages, disadvantages and problems were faced by teachers with GT, and these tended to be similar for each school. The advantages and disadvantages of GT given by teachers for both pupils and teachers merely expanded on those comments made by respondents in the questionnaire survey. Advantages for pupils, therefore, covered personal and academic areas, while advantages for teachers were both personal and professional. Some of the teachers observations are worth repeating here. One teacher noted that pupils

> find it easier to get along with a teacher that they know. I find most of the time they come up with their problems. They know that there is someone who is in charge of them, who cares for them ... So if there is trouble, they need help, they come to me. They wouldn't go to another teacher. It is good for the students (School D GTr1:Int).

Pupils were also seen to 'enjoy' GT because 'it's related to them. If you go into a good Generalist class you feel an enthusiam ' (School D DHM:Int).

Teachers were seen to have opportunities for gaining valuable experience through GT, particularly because of the freedom and flexibility offered by the programme:

> If a teacher is trained, experienced and has enough self-confidence to go his own way, then it means you have an unrestricted syllabus (School C HM:Int).

Similarly, teachers did not have to be restricted by the limits imposed by forty minute lessons (School C GC01:Int). Pupil/teacher relationships were strengthened:

> I suppose a teacher gets to know a class more than he or she would otherwise. They get to know them as individuals, they can treat them as individuals, they can help them along. I suppose a teacher gets a lot more satisfaction from that (School C DHM:Int).

The disadvantages for pupils, on the other hand, were mainly academic, caused by teachers teaching subjects for which they had no training or experience. For one teacher, non-specialist subjects were not taught 'as well as the other subjects I am specialised in, which is bad for the kids. I don't really understand what I am teaching at times. Not always, but sometimes' (School D GTR1:Int).

While the GT Co-ordinator of School D claimed that GT held no disadvantages for teachers, other staff disagreed. Many of the disadvantages seemed to stem from the type of training teachers had received:

> One [disadvantage] I think especially [for] those who are newly trained teachers, just like me who come straight out of the College ... [is that they] are asked to teach Generalist ... They know one subject, they are good at that one. They would do better if they teach that one. If they are forced to teach something they are not sure [of], then they have to go and find out and prepare programmes and lessons, and it takes a lot of time and gives them a lot more work. That's one of the disadvantages for the teachers. One thing is that more experienced teachers could be used in GT, say community teachers who have been teaching in community schools (School D GTr4:Int).

Another teacher commented that 'if I tell my students I'm not specialised, they won't be interested in my lessons [so] I never let them know that I'm not specialised in that subject' (School C GTr1:Int). Similarly, if a teacher is uncertain about a subject, then 'the children are, consequently, unsure ... so you lose everything' (School C HM:Int). The fear of pupils 'finding out' about a teacher's lack of training in certain subject areas was a real one, particularly for those teachers who had only recently graduated and who, therefore, were inexperienced and still insecure and uncertain about their teaching. The Headmaster of School C argued:

> Teachers are not trained. They haven't the background. They are frightened to break away from the syllabus, thinking it is God's Holy Writ, and because of that, they tend to slavishly follow and then find they cannot integrate. They cannot go their own way, and so they feel unsure of themselves. They don't know what they are teaching. They don't know how they are going to go about it (School C HM:Int).

Such a point was reiterated by the Deputy Headmaster of School D who had observed that teachers 'not trained in primary generalist methods ... find it hard to adapt ... Teachers feel "safe" with specialist syllabi and often feel lost without an exactly defined programme' (School D DHM:Qre).

The most important problem School A had faced with GT was a lack of staff, which according to the Headmistress, made GT 'not only impractical but impossible'. Therefore, GT had ceased at the school (School A HM:Int). Associated with this was that the Headmistress believed GT handicapped teachers' involvement in normal school duties because of the amount of lesson preparation time Generalist teachers required. In a boarding school, where many extra-curricula activities claimed the attention of staff, this was a distinct disadvantage of GT, particularly if it led to poorer preparation and consequently lower quality teaching and learning (School A HM:Int).

Most of the problems experienced by school staff with GT were specific to their level in the school hierarchy. That is, Generalist teachers experienced problems with lesson preparation and teaching; GT Co-ordinators had problems related to co-ordinating the course; and heads of schools noted problems with organising GT and allocating appropriate staff to teach in the programme. Primary trained teachers seemed to have fewer problems than secondary trained teachers with GT, mainly because primary trained teachers found GT similar in organisation to their previous experience in primary schools.

The main problem for one secondary trained teacher was that of

> the subjects I am not specialised in. I mean the content is there but I need ways of bringing it out to the kids, and also some things are a bit hard for me to bring across because I have to spend some time to read through [new subjects] and understand [them] and that takes time too (School D GTr1:Int).

Teachers were experiencing difficulties where they were required to teach subjects new to them. Teachers were unfamiliar with subject content and the way in which it should be presented to pupils. 'Thinking of more creative approaches' was difficult, particularly for national teachers who 'might not have experienced a "broad general education" necessary for effective Generalist teaching' (School E GTr:Qre). Allied with this were the lack of materials and 'excessive preparation' required of teachers with these subjects.

Teachers would have liked to have received more direction from education headquarters. In particular, one teacher would have liked,

> more guidance, more definitions of what GT is. More aims and objectives ... What are we supposed to be doing? Why leave it up to me to decide? This isn't fair (School E GTr:Int).

The Deputy Headmaster of School C maintained the lack of specific direction for GT led to uncertainty:

> That's why teachers felt, 'All right, we are doing Generalist teaching. But how do we do it?'. Everybody was floundering ... On the other hand, if we had received them [that is, directives] in the first place, then that would have given us time to argue against it (School C DHM:Int).

Guidance could have come from the GT Co-ordinators, but they were just as confused as their teachers. 'Everyone's going off on their own sweet way and no one is sure. Is it a general teacher? Is it general subjects? What is it?' (School E GCO:Int). Part of the problem for GT Co-ordinators lay in the fact that co-ordinating GT was an extra duty on top of an already full teaching load. No time was given to GT Co-ordinators for organising and supervising GT along lines similar to specialist Subject Masters and Mistresses. At School C, for example, the second GT Co-ordinator for that year already held the position as Subject Mistress for a specialist subject as well as being expected to co-ordinate GT (School C GCO2:Int).

When staff were attempting to implement GT in School D, the Deputy Headmaster (previously the GT Co-ordinator) said there were four areas of concern. First was

> the crisis of what we were aiming at and what we were trying to do. We didn't know. We were a bit lost in the first place. In the second year, we knew more what we were doing and went for it, and I believe it worked (School D DHM:Int).

Second, considerable amounts of time were 'wasted' because it took staff several terms to devise an appropriate method for programming GT. Third, weak teachers were a liability to their class, and 'that class noticeably deteriorates relative to the other' classes, but, he maintained, the better, more experienced teachers were 'entitled' to teach specialist subjects to the more advanced pupils in higher grades. Finally, later in-service training workshops within the school were not sufficient 'to help Goroka graduates adapt to a situation for which they have in no way been prepared'.

Where GT Co-ordinators and their teachers co-operated with each other, problems were few. However, the GT Co-ordinator of School B was critical of her teachers' behaviour and claimed that most of the problems there derived from the unreliability of staff who failed to have the necessary work completed on time (School B GCO:Int). Similarly, the Headmaster of School E noted that any teacher for GT would require 'a lot of initiative. He must plan in advance ... If he does it half-heartedly, then I think he'll get despondent' (School E HM:Int). Co-operation amongst GT staff and between Generalist teachers and their GT Co-ordinators seemed to be an important indicator of whether problems occurred in case study schools, and if so, how they were resolved. Most of the problems experienced were solved within the school, calling on suitable staff for advice and assistance.

Headmasters and Headmistresses generally, had little to do with GT and so were unable to comment on the nature of the problems their schools and teachers had experienced with GT. The Headmaster of School C did discuss the problem of staffing GT when he first arrived at the school. GT was allegedly introduced to School C in 1976, the year prior to the Headmaster's appointment at that school. GT was introduced 'on a half-hearted basis' which had not proved to be very successful. On his arrival at the school, he was met by former

Generalist staff who refused to be part of that programme in 1977. Because GT was policy, the Headmaster had to 'insist that it was done'. The result, therefore, was that first year Goroka Teachers' College graduates

> were just put into it. They didn't particularly want to, but they had to ... None of the one's who had any experience would touch it with a barge pole. I managed to blackmail one into taking it ... aiming at him being the course co-ordinator. A lot of the others, they were all young teachers [and were coerced into taking GT] (School C HM:Int).

So, with staff attitudes like that, the Headmaster was forced to 'play games', which he considered 'unfortunate' (School C HM:Int). In schools like this, GT certainly did not have a very auspicious beginning.

Because of the lack of information about GT from education headquarters and inspectors, schools tended to rely on the expertise and willingness of other staff within their school to assist with problems they faced. 'We just did what we thought was the right thing to do' (School D DHM:Int). For the type of GT most schools were practising, this was often considered adequate, however, if GT was to continue on a long term basis with an integrated syllabus, then more guidance and assistance from education headquarters, Goroka Teachers' College and inspectors was essential. Staff at School C had forwarded copies of GT materials they had produced to the Curriculum Unit, for example, but they had apparently received nothing in reply:

> I'm very jaundiced on this because there was an attack on secondary schools by Curriculum saying there was no feedback ... and I'm going to quote you the vast number of letters and information that we sent off and the number of times I had no acknowledgement (School C HM:Int).

The information schools had received about GT up to the time of the interviews was considered by staff to be very sketchy. 'It still leaves an awful lot on the teachers if they are going to make it work'. The advice to teachers from Regional Secondary Inspectors did not seem to help them much either (School C DHM:Int). Advice by one inspector to School E about a problem teachers were facing, for example, was 'Well, you just do whatever you can, whichever way you think is the best' (School E HM:Int). The attitude of the Deputy Headmaster of School C to the Department of Education was that 'I don't think anything from headquarters helps us at all anyway. In fact, largely we ignore it if we can' (School C DHM:Int).

4.5 The Success of GT

GT had been successful in two case study schools, unsuccessful in one, and had variable success in the other. Staff at School B thought GT had been successful because of the benefits pupils had derived from that style of organisation. One teacher did not wish to fully commit himself to a statement of whether GT had been successful. Rather, he said 'I think the Generalist programme is good. I wouldn't say it's successful or unsuccessful, but I would say its' worthwhile' (School B GTr1:Int). Staff at School E however, thought the success of GT became obvious through the personal and academic advantages derived by both pupils and teachers. They attributed this success mainly to co-operation amongst the staff. The Headmaster also added:

> I don't think it is any good asking, or directing a teacher to take a Generalist class when they don't want to. It's difficult. You've got to have a fairly broad knowledge. You've got to have confidence and you've got to have a lot of initiative. I think a lot of the national teachers ... want to teach the subjects which they've been trained for ... Generalist is a bit frightening for them. So here, all the Generalist teaching has been done by expatriates (School E HM:Int).

In these two schools then, GT had been successful according to teachers, because pupils had benefitted in a number of ways. Even though pupils benefits had been noted by one teacher, that teacher also pointed out that,

> not knowing what Generalist teaching is, I'm not sure whether I'm doing the right thing ... It might be something different [to Generalist teaching] and that's what's successful (School E GTr:Int).

Most of the staff at School D were in two minds about GT. When completing their questionnaires, two of the teachers from School D thought GT had been unsuccessful because they felt pupils needed subject specialists rather than Generalist teachers, and, because teachers' training had not incorporated all the subjects teachers were required to teach. They were unsure about the depth and breadth of content which required consideration in certain subjects (School C GTr1:Qre). When interviewed, however, neither teacher was very sure about the degree of success GT had achieved in the school. Such a change in attitude could possibly be attributed to these teachers becoming more at ease with teaching in the Generalist programme, because by that time, GT had returned to the more familiar subject specialist approach. The GT Co-ordinator and one teacher at School D considered GT a success because 'the teachers are happy and the kids are learning well', and because teachers co-operated well with each other (School D GCO:Int; GTr3:Int).

The Deputy Headmaster at that school had mixed reactions about the success of GT:

> It's hard to say. One answer would be 'No' because we haven't had long enough to develop it. I think we've failed because we haven't produced a thing that's traditionally needed here, the authority of a programme behind it, and authority of a set syllabus ... I think we've been a bit harassed because we've been experimenting ourselves, and I wasn't oriented towards programmes. I think that is one of our failings (School D DHM:Int).

On the other hand, however, the Deputy Headmaster also considered areas where the success of GT had been proven according to his assessment of the programme:

> I think that the grade nines now are better at discussion, working things out themselves ... I've got nothing to prove this. I believe they are better classes because I can go in and say, 'Well, what do you think about this?', and they react. Whereas you notice in the older classes, they just sit there and wait to be given the answer ... I think it's [Generalist Teaching] been successful because I ... know we have got away in grade seven (and we had it in grade eight until we went back [to subject specialisation]), we got away from teaching things that had no meaning (School D DHM:Int).

However, Generalist teachers and the current GT Co-ordinator of the programme seemed satisfied that at least some aspects of GT had been successful at School D. By 1977, however, the original programme had begun to fall down in a number of areas and was severely criticised by the Regional Secondary Inspector for that area (School D High School Report: March 4, 1977), a criticism which was probably instrumental in the move away from thematic teaching and back to specialist teaching by the Generalist teachers.

Almost every staff member thought GT had failed at School C, except for the brief period of time when a thematic approach had been experimented with, which all staff agreed had been successful. The Headmaster argued that anyone who said GT had been successful was only

> shop window dressing. I don't believe that there is a school in the country that's doing it properly. I think people are saying it because it is the 'in' thing, and if you are doing it, well then, you are going to get nicely pat on the back (School C HM:Int).

Only one teacher thought that GT had been a continuous success because 'teachers don't seem to be complaining ... and we haven't failed any students at all' (School C GTr3:Int). The reasons given for why teachers thought GT had been a failure at School C tended to coincide with the level they held in the school hierarchy. First, teachers thought GT had been a failure because they had no programmes to which they could refer, and there was no Subject Master or Mistress for GT (School C GTr2:Int). Another teacher's reason was the lack of communication between Co-ordinators and staff (School C GTr1:Qre). Second, the GT Co-ordinators were uncertain about the degree of success of the programme mainly because what they thought GT was, was not what their staff were practising (School C GC01:Int, GC02:Int). Generally, however, they did not think GT had been very successful except for the brief exercise with thematic teaching. Third, the Deputy Headmaster said that teachers had not been adequately trained or prepared for what was expected of them in the GT programme. This, he attributed to generally inadequate preparation by the Department of Education for the whole programme. Therefore, teachers 'are floundering, trying, working very hard, getting frustrated and some of them just plain giving up'(School C HM:Int).

In summary, GT experienced various degrees of success and failure in case study schools. For some respondents it was successful because pupils derived certain benefits from the programme. For some respondents it was successful because staff worked well together and were co-operative and helpful. For other respondents the failure of GT was attributed to the lack of organisation in schools, which could be directly linked to lack of planning at education headquarters. The success or failure of GT in absolute terms was difficult to determine for some teachers because they did not know what GT was, and what they considered to have been successful or not might have been very different to what the Department of Education expected. Similarly, the success of GT changed from time to time in schools, which indicated that GT was in a state of flux.

4.6 Reactions to GT

Reactions of staff to teaching in the GT programme ranged from enthusiastic acceptance to 'horror'. In School E, for example, staff 'volunteered to take the Generalist class' and were happy to continue teaching in the programme (School E HM:Int), even though one teacher was unsure of the compatability between what GT was supposed to be and what that teacher was doing (School E GTr:Int). Similarly, in School A, the reaction of staff towards GT had been initially favourable. The Headmistress did admit, nonetheless, that teachers would probably be more content teaching in the 'subject areas for which they have been specifically trained' (School A HM:Int). For Schools B, C and D, staff reaction depended to some extent upon whether or not staff were primary or secondary trained, national or expatriate, a recent graduate or an experienced teacher. This was not always the case, however, and one GT Co-ordinator observed that GT is something none of the staff 'really think about ... GT is something three of us do' (School B GCO:Int).

Primary trained teachers in Schools B and D were generally quite content in the Generalist programme because structurally it was similar to that they were familiar with in Community Schools, where teachers had been trained to teach the one class for extended periods of time. Expatriate teachers were generally less averse to GT than national teachers, as was the case in Schools D and E. This could, perhaps, be traced to their more widespread experience and higher level of training than national teachers. GT would have posed less of a threat to expatriate teachers. One Headmaster argued that 'it's very wrong to say to a teacher, "you must take Generalist", when they don't want to. If they don't feel suitable, chances are it's going to flop' (School E HM:Int). Secondary trained Goroka graduates were generally averse to GT when they were put into the programme initially. With time, they became 'used to' teaching in a slightly different style, however none of the teachers wished to continue in the programme. One of the reasons for not wanting to continue in the GT programme given by one teacher, was because 'I am not trained in other subject areas. I have no confident [sic] in teaching them' (School B GTr1:Qre).

Schools C and D present interesting cases. The Headmaster of School C said that previous GT staff had refused to continue as Generalist teachers so he had been forced to coerce recent Goroka graduates into GT. He also 'blackmailed' one teacher into taking on the responsibility as GT Co-ordinator (School C HM:Int). Staff reaction was that of

> horror ... because they felt out of their depths. They felt unsure of themselves, inequipped for certain of the subjects they were being forced to take ... Therefore, you had staff who were not happy in their own role, didn't really know what their own role was either, and I don't blame them (School C HM:Int).

One teacher at this school later resigned, using 'problems with GT' as one of the reasons for leaving. Even though the rest of the teachers became 'used to GT' as the year progressed, none wanted to continue teaching in that programme beyond 1977. This seemed to be because 1977 had been their first year of teaching and they wished to gain some confidence and experience in their specialist subjects. The GT Co-ordinator had registered few complaints from teachers, 'but then, I just think they are really thinking of it as three subjects' (School C GCO2:Int). None of the staff were really keen about GT and did it merely because they were told to. They gradually reconciled themselves to teaching in the programme, however, although they were never really happy with it.

In School D, staff were initially apprehensive and later enthusiastic about GT, particularly because 'many of them were Australian primary school teachers' who transferred to secondary schools when primary schools became fully localised (School D DHM:Int). When the composition of staff in the Generalist programme became all national, reactions were far less favourable. One teacher's response was, 'I really can't say whether it's successful or not because I don't know what Generalist is, and because I was forced to teach it' (School D GTr4:Int). The most negative reaction to the programme at School D, however, came from non-Generalist staff teaching specialist subjects in grades 9 and 10. This was particularly noted from expatriate staff who claimed that pupils entering grade 9 from the Generalist programme had not been taught the necessary content and skills which grade 9 work was to build on. As a result, a considerable amount of time had to be spent on remedial work. Specialist teachers saw GT negatively affecting pupil performance and academic standards. The Deputy Headmaster maintained that these attitudes were little more than 'pure prejudice because they hadn't got any of our material [that is, pupils] in grade nine and ten at that time' (School D DHM:Int).

The reactions of staff in the different schools was largely governed by the attitude of senior staff. At School C, for example, the Headmaster was a strong leader, but negative in his attitudes toward GT. This tended to affect his staff in a similar way. On the one occasion when the Headmaster provided positive leadership and support to GT through conducting an in-service programme, GT proved to be successful. A contrast can be found in School D where the initial GT Co-ordinator for GT was keen and enthusiastic about GT. He provided positive psychological and material support for his staff, which resulted in a highly successful and innovative programme for the period of time he was in charge. School B and School E had neither strongly positive nor negative attitudes held by either heads of schools or by GT Co-ordinators towards GT. The result was that 'average' forms of GT seemed to exist. The attitude of the Department of Education also affected teacher reactions and the outcomes of GT. Headquarters lack of guidance or support implied disinterest to many teachers.

When comparing Generalist to specialist teaching, respondents said there were advantages and disadvantages in each. Teachers in School C were unable to make this comparison because they had not yet taught as specialist teachers. In fact, however, they were effectively teaching as specialist teachers in terms of classroom approach, the only difference was the structure into which they had been slotted. One teacher at School D confessed to not being able to tell the difference between specialist and Generalist teaching, however, that teacher found it easier teaching

> in my own specialist subject areas ... I understand what I am teaching and ... it's easy for me to follow up my plans. Whereas in Generalist ... I really find it hard (School D GTr1:Int).

The Headmistress of School A preferred a situation where teachers took the

> fields that are of special interest to them ... I think the variety of teachers, as far as the students go, is good also, because what might be lacking in one teacher, is complemented by something in another (School A HM:Int).

With the GT style of organisation, such teacher deficiencies could not be compensated for. GT was seen to be 'psychologically' better but academically worse for pupils by the GT Co-ordinator at School B. On completing grade 7, pupils no longer required the 'psychological boost of having one teacher to lean on', and by grade 8, pupils 'need the academic ability of a specialist teacher - one who is trained to do a special job' (School B GCO:Int). The personal benefits pupils gained through the Generalist programme were considered a definite advantage over the specialist subject style of teaching and learning.

GT was considered much worse for teachers mainly because they were expected to teach subjects they were not familiar with. One teacher maintained that she could not tell the difference between the two, but she thought she preferred specialist teaching (School D GTr1:Int). Clearly teachers were confused. Opposition to GT in some schools was strong, even though GT was being practised only in terms of its structure, and not in terms of a classroom approach.

4.7 The Future of GT

Respondents were asked what they thought the future of GT should be - whether it should remain in schools or whether it should cease. Most respondents suggested that GT should stay in schools, but only if: teachers were trained specifically for GT (School B GCO:Int, School D DHM:Int); the Department of Education provided positive support in the form of a statement of aims, objectives, guidelines, materials (School B GCO:Int ; School C GCO1:Int; School D DHM:Int); provision was made for a separate department with a GT Subject Master or Mistress in schools (School C DHM:Int; School E HM:Int); teachers were happy teaching GT (School D GTr1:Int); and if GT was taught by experienced teachers only (School C GCO1:Int, GTr1:Int; School D GTr1:Int).

If GT was to be continued in the future, it should be organised in a way conducive to success. When GT was being taught only by expatriate teachers, the chances of success were thought to be very favourable (School D DHM:Int). With a wholly national staff, there was still no reason why GT should not continue to be successful:

> The argument has been that national officers are not capable of teaching GT. I think that's ridiculous. We have people coming in, we've had primary inspectors coming in and showing how primary school teachers do their programmes, ... and they were done well. They obviously had some idea about what they were aiming at, and they were going ahead and doing it in their own way. And looking at that, I cannot see any reason why a national officer cannot follow these techniques if his training is in method rather than in subject area (School D DHM:Int).

The GT Co-ordinator at School C maintained it was a waste of time and effort to introduce a change like GT into the system only to withdraw it when it appeared to be floundering. He thought that teachers needed encouragement:

> You really need a push. You need somebody right behind you, and that's the headquarters. If they want it to be successful, they have to stand right behind you. If you need any sort of assistance, they should be prepared to give it (School C GCO1: Int).

For this reason, GT should remain in high schools.

One Headmistress and one teacher were doubtful about the future of GT. The Headmistress preferred to reserve judgement because too little was known about GT and its effects in schools (School A HM:Int). The teacher said that while the concept of GT had merit,

> I don't know what GT is, and I think the term is going to disappear anyway, because people don't know what it is ... It will gradually disappear (School E GTr:Int).

For GT to continue and be successful, co-operation amongst Generalist staff and inter-departmental co-operation within schools was seen to be vital (School B GCO:Int; School C DHM:Int).

The Headmasters of Schools C and E thought the decision about the future of GT should be left with the school. One commented however, that

> I don't think you phase it out, you kill it. It's as simple as that ... The trouble is, by starting it off in the wrong way, which is to have no preparation, no thought, and just to have a directive, is a kiss of death to anything ... Now, unfortunately, 'Generalist' is a dirty word. People cringe when I mention that's what they've got to do. Therefore, you've got an emotional block now. I would kill it (School C HM:Int).

He also commented that if GT was to succeed in the future,

> you need at the top [that is, education headquarters], someone who truly believes in it. By truly, I mean absolutely committed to it, because they feel it is the right thing, not because they are told to do it because it is right ... So I think that until they are prepared to spend a lot of money, and a lot of time to get the right people ... who can feed out materials, trial it, get it back, alter it [then Generalist Teaching will fail] (School C HM:Int).

Obviously then, if GT was to remain in schools, and was to be successful in schools, the Department of Education would have to give careful thought and consideration to what it was trying to achieve through GT. Teachers must be 'prepared to cope with any situation, be prepared to move into almost every subject area, and I think this is going to take an awful lot of doing' (School A HM:Int). Teachers would require training specifically for GT (School B GCO:Int). Provision would have to be made for statements of aims and objectives, and materials production. Within schools, a reorganisation of existing structures would have to make way for initiating a new department for GT. The training and allocation of teachers to schools would also have to be carefully monitored. In fact, to 'redeem' GT from its low status in the eyes of teachers, it appeared that any revitalisation programme would need to start from the very beginning.

Whatever the nature of the assistance required for GT, the Headmaster of School C said,

> well, you are again coming back ... to who is going to be able to do it, you see. People in Konedobu [education headquarters], RSIs [Regional Secondary Inspectors] and so on are people who haven't been in the schools since the system was introduced, and they're not aware of the teaching problems that are here (School C HM:Int).

Despite the optimism of some teaching staff, the future of GT by the end of 1977 looked grim. Even if the Department of Education was able to provide teachers with more concrete assistance and guidance, the attitudes that teachers had already developed towards GT would probably work against such assistance.

4.8 School Practice II: Recapitulation

In conclusion, perhaps the final words can come from the Headmaster of School C and the Deputy Headmasters of Schools C and D who most forcefully articulated the views of many Generalist teachers:

> Well, I think it was just landed with us and we just had to make it work. It was very difficult. None of the staff wanted it. The Headmaster didn't want it. I didn't really want it. Nobody wanted it ... And I think it was largely a waste of time (School C DHM:Int).
>
> The way it has been implemented has been criminal. I don't think you can put it any kinder than that because it means the whole idea has been put into disrepute (School C HM:Int).
>
> If they [headquarters personnel] have a negative attitude to it [that is, Generalist Teaching], it is like a disease that communicates itself, and it will cease to be viable. It will cease to be educationally sound because there will be so many forces against it (School D DHM:Int).
>
> GT was brought in doomed to failure because it was not brought in with clear thought and planning. And if they haven't yet learned that clear planning is an absolute essential ... (School C HM:Int).
>
> A lot of stuff that is done is introduced for the right reason, but the wrong way, and of course, there is an awful lot that is introduced for the wrong reason in the wrong way. That's doomed. Now, I think GT is one of those. The wrong reason, the wrong way. I could argue for it, but it would be many years before you have the staff in schools

> here capable of doing it properly. Therefore, it is going to be a dirty word for a long time. You talk honestly to teachers and ask them, 'Would you prefer a system of specialisation, or would you like Generalist?' And if they are being honest, I don't think one would say they like Generalist (School C HM:Int).

> Curriculum Branch has one of the most negative attitudes to Generalist teaching that I have encountered. There must be a stronger word. Destructive. It's more than negative. It's positively negative, and thereby, this is direct sabotage, and if they do continue this, they will make [Generalist teaching] fail, and they have the power to do this. They're not giving back-up materials and moral support [so] it will fail. The other factor on whether it should continue or not is Goroka Teachers' College - whether they are going to be negatively positive or positively negative. I think they hold the key. I think they could push. I think my order of importance is Goroka Teachers' College, Curriculum Unit, and I think they should lead it (School D DHM:Int).

> It is my opinion that specialist teaching at [School D] is a meaningless ritual of learning and note making, and that Generalist teaching using primary methods is an educationally sound approach ... It is also my opinion that Generalist teaching has or will fail because of the lack of direction by Secondary Division and the lack [of] suitable training by Goroka Teachers' College. There has never been a commitment by anyone to Generalist teaching. Failure is inevitable, not because Generalist teaching does not work, but because too many people don't want it to work (School D DHM:Int).

Chapter Five

THE SURVEY AND ITS IMPLICATIONS

Chapters 2, 3 and 4 presented administrators' and teachers' views about the policy and practice of GT in provincial high schools in PNG. The rationale for, implementation of, reactions to, outcomes and future of the change were sought. The results indicate a number of contradictions between the policy and practice of GT.

Chapter 5 will analyse and discuss these issues in detail. The chapter begins with an examination and discussion of the seven research problems around which data collection were organised. The second section will be presented in terms of the change, the system, the participants and the strategy used to implement GT. Third, a brief description the subsequent history of GT will be given and, finally, some recommendations for curriculum change in PNG will be presented.

5.1 Findings on the Research Problems

This section will review the research problems posed in Chapter 1.2. Findings on the research problems were discussed in considerable detail in Chapters 2, 3 and 4, however, it is appropriate at this stage to synthesise this information to provide specific comment about each question in turn.

1. What was GT?

GT was a change implemented in PNG secondary schools in 1975, which exhibited both curricular and organisational characteristics. In theory, GT implied curriculum integration, but in practice this was realised only rarely. Neither education headquarters personnel nor teachers were able to clearly and precisely define what GT meant. Various overlapping interpretations of how GT was to be implemented were presented by individuals at all levels of the system, but often these interpretations were inconsistent. A statement of aims and objectives for GT might have helped to explain what GT meant, but they too were conspicuous in their absence. The conclusion to be drawn from results presented in Chapters 2.2, 2.3, 3.2 and 4.3 is that there existed no one generally agreed upon definition of GT.

2. What was the policy behind the introduction of GT?

No clearly defined policy or statement of aims, objectives or rationale was evident for GT. Was GT an experiment or was it a planned change by fiat?

Discussion about GT when it was initiated was said to be little more than just 'general gossip' and nothing was committed to paper until Secondary Circular Letter 1/76. Original opinions indicate an experiment. Later documents and practice revealed it to be policy, but there is no apparent link between the two. Was there a written policy on GT or was nothing committed to paper? Headquarters personnel implied there were few files kept on GT, while available materials indicate files had, in fact, been kept. What was being practised and what was supposed to be practised in schools? According to headquarters personnel and many GT teaching staff, GT was being practised. However, no one was able to clearly define or explain what GT was, or what the aims of the programme were. Was 'Generalist Teaching' successful in schools, or was something else successful?

The results presented in Chapters 2.1 and 2.4 showed that policy was of a laissez faire type where schools and teachers were expected to define their own aims, objectives and practice for GT in light of the human and material resources they had at their disposal. In effect, the policy was one of no policy, which some headquarters personnel believed was preferable to a rigidly defined and directive policy statement. The only statement about the practice of GT which could be considered to approximate a policy statement was the mainly organisational direction in Secondary Circular Letter 1/76, which stated that GT was compulsory in all schools where one teacher taught three subjects or half the periods a week to one class.

3. *What mechanisms were used to put GT into practice in schools and why were they used?*

Authoritarian methods were used to implement GT in schools. Chapter 2.4 discussed the processes used to bring about the practical realisation of the idea. GT was little more than an idea passed on to teachers. Without headquarters guidance or support, classroom teachers (many of whom had a relatively low level of training and limited teaching experience) were expected to translate a very sophisticated concept into classroom practice.

Why this method for implementing GT was used is not certain. Some headquarters personnel argued that this was a deliberate move to give teachers the freedom and opportunity to experiment with a new way of teaching without restriction. Other personnel argued, however, that the manner in which GT was introduced to schools was no more than a poorly planned and ill-prepared change. The evidence tends to suggest the first view was a rationalisation and tends to support the latter view.

4. *How did schools and teachers cope with GT?*

Considering the circumstances under which they were expected to operate, the majority of schools and teachers coped remarkedly well with GT. Very few schools failed to comply with the organisational requirements of the secondary circular letters which directed that GT be implemented. What teachers were practising, however, was another matter entirely because the majority of teachers tended to interpret and practice GT in a way consistent with their previous training and experience - that is, subject specialisation. The practice of GT was discussed in Chapters 3.3, 3.4, 4.1 and 4.2. In most cases, school organisation and timetabling was easily adapted to meet the organisational requirements of GT. That was all education headquarters personnel seemed to want - as long as the interpretation of GT by schools was considered acceptable by headquarters personnel, then GT was seen to be working well. While most schools and teachers were able to cope with GT in this way, teachers seemed to find it psychologically difficult to adapt themselves to the role of 'Generalist Teacher'.

5. *What were the attitudes of teachers and headquarters personnel towards GT and what were the reasons for these attitudes?*

While many people were unhappy with GT, most were resigned to the fact that GT was there. For teachers, GT was something they taught but did not think about too much, unless someone questioned them about what they were doing. For headquarters personnel, GT obviously had problems, but they did not have the time, personnel or interest to become too involved with what was going on in schools. Teachers struggled on as best they could under the circumstances, but many were keen to return to specialist subject teaching as soon as the opportunity presented itself. The main reasons for this attitude on the part of teachers is very obvious from Chapters 2.5, 2.7, 3.5, 3.6, 4.4 and 4.6. No guidance or support was given to teachers in any immediately usable form. Teachers were left to their own devices to provide everything from aims and objectives to a syllabus and teaching aids for GT.

Reactions and attitudes of headquarters personnel towards GT were generally non-committal, except in a few cases where the introduction of GT to schools was criticised for being somewhat irresponsible. Few personnel seemed prepared to speak out strongly in defence of GT, possibly because two years after GT had been put into schools, its status was still unsure and the exact details of its practice unknown. The moderately positive attitudes of some people toward GT can perhaps be attributed to the fact they they felt some responsibility for GT because it had originated within their section. The more negative attitudes of some headquarters personnel can be traced back to criticism being levelled at their sections for not providing the appropriate support for GT. This lack of support was considered justified in the formative planning stages of GT by some sections at headquarters.

6. *What were the reasons for the success and/or failure of GT?*

In real terms, GT was a failure. The failure of GT can be traced directly back to the inability of the initiators of the change to define, plan, prepare for, implement and support a change they thought appropriate and desirable, as the results in Chapters 2.6, 3.7 and 4.5 revealed. Any limited successes the programme experienced in individual schools can be attributed to the hard work and initiative of dedicated teachers, but the initial headquarters failure was compounded by teachers who had neither the educational background, training nor experience to cope with the demands required by a change of this magnitude.

7. *How can lessons learned from GT assist in future curriculum changes in PNG?*

There are many lessons which can and should be learned from GT if the failures and problems experienced are not to be repeated in future curriculum change programmes. Recommendations will be detailed in Chapter 5.4

5.2 Theory and its Implications for the Results

Change in education systems is continuous and can be initiated deliberately or be evolutionary. This study was concerned with a deliberate change. Because categories of change are not discrete, change in any one part of a system will promote change in other areas, whether anticipated or not. This means that to initiate an educational change is a complex process which will be conditioned by a number of factors. Table 5.1 provides a summary of these factors and describes their extreme characteristics.

Table 5.1 Factors Affecting the Planning and Implementation of Change

Factor	Characteristics
The Change	Curricular or Organisational Large or Small
The System	Authoritarian or Democratic Centralised or Decentralised
The Participants	Limited Training or Highly Trained Limited Experience or Highly Experienced
The Strategy	Cataclysmic or Gradual Total or Piecemeal

In developing countries, changes occur in often authoritarian and mainly centralised education systems. They are introduced to often poorly educated and trained personnel with relatively little participation by those most likely to be affected by the change. This section will examine each of the four factors presented above with reference to the practice of GT.

The Change

The origins, development, rationale and meaning of GT were hazy. Secondary Circular Letter 1/76 suggested that the change was both curricular and organisationally oriented, but no one was sure. The circular suggested the form GT should take, but no definition of the concept was provided, nor were aims or objectives outlined. According to Inlow (1966) and Beeby (1970) a good curriculum should have flexibility to enable experimentation by more able teachers, while at the same time provide sufficient guidance and support to less able teachers. GT certainly met the former criteria, but not the latter.

What was GT? Was GT meant to follow Secondary Circular Letter 1/76, or was GT to be defined in terms of the way individual teachers interpreted and practised it? Certainly there was no consensus by headquarters personnel about the way GT had been interpreted and practised. Departmental policy on GT was vague. Policy seemed to be that interpretation of GT was open, and that policy was being met as long as schools followed the suggested period allocation for classes and teachers. Thus beyond the organisational criterion of one teacher/ three subjects, 'GT' was so loosely defined as to be virtually meaningless as a term. Beeby (1966: 43) observed that unless teachers are sure of the goals towards which they should be working, change only 'threatens security' and teachers will do little more than 'mold' the change 'as closely as possible to familiar practices'. This was, in fact, what happened with GT.

Secondary Circular Letter 1/76 presented GT as a curricular change which demanded a complementary reorganisation of the junior secondary school structure. Implicit in this change were attitudinal and role changes in teachers, quite different to those attitudes and roles many of the teachers had previously experienced. As a new approach to teaching and learning in PNG, GT had potential. But it was an idea that demanded close co-operation amongst personnel operating at every level of the education system. It was an idea that required explicit definition, a clearly defined policy and structure, and a well planned support system and strategy for change - it it was to be accepted by teachers and made successful. However, a state of confusion existed simply because administrators injected a new label into the system without sufficient clarification or explanation of its meaning, or what was expected of teachers.

The type and extent of change that does eventuate in any education system will depend very much on what the change initiators hope to achieve, whether it be a minor alteration of existing conditions, or an extensive restructuring. Miles and Schmuk (1971: 14) delineated four school improvement approaches of which three are appropriate to GT. These are first, structural changes which often result from legislation; second, curricular changes which tend to focus on classroom practices and procedures, teaching and learning materials and equipment; third, role shaping where the roles of teachers, administrators, pupils or parents are reoriented to bring about specific change in the performance of existing roles; and fourth holistic approaches to change which involve the creation of new or innovative education systems to minimise or avoid constraints imposed by the current system. Such change incorporates structural, curricular and role-shaping substrategies.

GT was a curriculum innovation in name, which assumed quite radical changes in teachers' roles and attitudes. Yet practice showed GT to be interpreted as a limited structural change by most teachers, many of whom retained existing attitudes and roles.

Change can occur on a large or small scale. Change can involve major alterations of existing structures and ways of doing things, or it can consist of limited alterations to specific areas within the system. For planners to be consciously aware of the scale of a proposed change is imperative to the outcome of the change. The scale of change will serve to determine change strategies as well as who will participate, in what capacity, and at which stage in the process. For some writers, large scale change has no place in education (Phillips 1975), and many writers would argue that a piecemeal approach is the only effective method of change (Taba 1962; Schwab 1969). The only guideline for change initiators and planners to work from is the nature of the change itself. If, for example, the philosophy of education in a country is modified for some reason, requiring concurrent alterations in aims and objectives, widespread change is necessary. Such a change in philosophy could have far reaching implications for administrative organisation, teachers' roles, curriculum aims and content. Any change requiring conscious change in school organisation, teachers' roles and curricula could be considered large scale. Small scale change, on the other hand, would cause far less disruption to the existing system. Such change would be more in the order of procedural reorganisation requiring minimal change in teachers' and administrators' attitudes, values and roles. Such changes are likely to be far more quickly and easily absorbed into the existing system than large scale changes of the type described above.

In principle, GT suggested a change of considerable magnitude, but in practice GT was a small scale change. Radical curriculum organisation and changes in teachers' roles and attitudes occurred in very few schools. In retrospect, the change of 'Generalist Teaching' met none of Bolam's (1975) four criteria. First, the relevance of the change was not established prior to its implementation. The relative advantage of GT over existing practices was not readily apparent to teachers. GT was unable to compete on the PNG education market for existing scarce resources, and the practicability of GT being able to operate in the existing organisational framework had not been proven prior to its introduction.

Secondly, GT was unable to meet the necessary requirements Bolam outlined in the magnitude of change criteria. Prior to GT being implemented, few people were able to observe GT in practice and no attempt was made to ascertain how well teachers were able to understand the nature or implications of a change like GT. As a large scale change in principle, GT had important implications for both planning and implementation procedures - neither of which were considered by headquarters personnel.

The third criterion for determining how a change will be received refers to normative factors. GT was not compatable with existing practices. It was a change very different in concept, structure and practice to any other method of teaching and learning teachers had previously experienced, and this worked against the change being successfully adopted by teachers. The potential GT had for promoting classroom change in the future was also limited, because GT did not provide a firm or well enough understood base from which teachers could operate.

The final factor requiring consideration is one of cost-benefit criteria. For teachers, the costs of GT far outweighed any benefits it might have generated. GT cost the teachers considerable extra time in lesson preparation, it eroded what confidence they had in their abilities, as they were required to teach subjects for which they had neither the necessary training nor experience. Teachers were worried about their pupils who, they were aware, suffered because of teachers' own inadequate training for GT. The benefits of GT can by no means be neglected, however. Many personal benefits and rewards were noted for both pupils and teachers.

In terms of Bolam's four criteria then, it seems that GT had only limited potential for succeeding in the PNG education system. In retrospect, few positive arguments for introducing GT in such a form and fashion in the first place seem possible.

The System

Education systems can vary widely between authoritarian and centralised systems, at one end of the scale, to democratic and largely decentralised systems, at the other end. Many developing countries, including PNG have education systems which tend to be authoritarian in nature and centralised in structure. Decision making is carried out by a central group whose decisions are then conveyed to the members of the system by means of directives, newsletters and through key personnel, such as the inspectorate and curriculum officers.

The change model in such a system is of a 'top-down' type where the initiative to change emanates from the centre and rarely from the periphery. In this system, teachers rely heavily on their superiors for guidance and support in their teaching. Some writers (eg. Hawes 1972) would argue that this type of system is the most efficient for developing countries, given the type and quantity of material and human resources available to such countries. The rapidity of educational change in developing countries would also seem to favour centralisation of functions over decentralisation of activities.

The 'grass-roots' type model, on the other hand, comes from the initiative of teachers when they see the need for change. It has a more democratic perspective than the administrative model, tends to be institution-specific and, more importantly, assumes teachers with the confidence to innovate, independent of centralised support.

In retrospect, the PNG education system was unable to provide adequate support in six key areas which have been identified as contributing to changes not being accepted in developing countries (Beevers 1968: Hawes 1972; Commonwealth Secretariat 1974; Unesco 1976). The six problem areas facing developing countries education systems included: first, a poor organisational infrastructure for change; second, insufficient numbers of skilled trained and experienced personnel at almost every level; third, lack of finance for supporting change on a continuous basis; fourth, inadequate support services; fifth, little concern for evaluating the new programme; and finally, cultural differences between change initators and practitioners. If the system cannot support a change, then, in all fairness, administrators should not expect teachers to attempt the change. If the system had been able to provide continuous and adequate support for teachers in the form of written aims and objectives, curriculum materials and in-service training, then GT, introduced by authoritarian means in a centralised system, could have been an example of a well-managed and successful change. Results from the study indicated the opposite eventuated. GT was poorly managed and organised from its inception, and so the chances of it succeeding were minimal. Teachers could not understand why change was occurring or what the change was hoping to achieve. Teachers were unable to see the need for such a change and so were unable to implement it effectively or continuously.

GT originated in the upper echelons of the Department of Education hierarchy and was quickly introduced to schools. In fact, GT was a classic example of a 'top-down' change. There was neither participation by teachers in planning and preparing for the change, nor was there any participation by many headquarters sections of the Department of Education. The idea originated with a small number of Secondary Division personnel, was discussed almost exclusively within that division, and Secondary Division was also the authority behind ensuring that schools and teachers complied with the directive that the division distributed to schools

GT was introduced to schools in an authoritarian manner, but once in the schools, the change assumed some of the characteristics of a 'grass-roots' type model. Administrators dictated that a change would be introduced and then sat back and expected teachers to take the initiative to plan, organise, develop and practice the change. Teachers, however, were unable to cope with their new found freedom and responsibilities. They were used to operating in an authoritarian system, where someone else made the decisions, provided materials and accepted responsibility for mistakes. Teachers generally had neither the training nor experience to perform in the way headquarters personnel would have liked. In the context of the system, headquarters personnel behaviour was not so much an enlightened attempt to distribute responsibility, as a short-sighted abrogation of responsibility.

The Participants

The personnel participating in GT ranged through the entire hierarchy of the system from headquarters administrators to classroom teachers. In the case of GT, however, who participated is perhaps not as significant as how much they participated. The details of who participated in what capacities in GT were outlined in Chapter 1.2 and do not require reiteration at this point.

The type of participants in an educational change is often a constant, because administrators, teachers, curriculum writers, ancillary staff and so on will all be involved at some stage during the change process. What does vary, however, is the nature and extent of participation by these groups, which is influenced by the type and scale of change being introduced, the nature of the system, and the change strategy utilised. Many writers (eg. Fullan 1972) advocate widespread and active participation in change, because whatever the nature of the change, it ultimately returns to people having to change their behaviour in particular ways. Other writers, like Hawes (1972), argue that curriculum functions need to be centralised in developing countries. With participative strategies, conflict and confusion might be the only result in developing countries because of the variety of people, opinions, values and interpretations of a curriculum change possible.

However, centralisation of functions and participative strategies do not necessarily cancel each other out. There is no reason why they cannot both be combined in such a way as to promote efficient implementation and continued acceptance of the proposed change. Even if teachers' capabilities as active participants in the planning stages of a change are limited, they are still able to be active in many other stages in the change process. Administrators have an obligation to keep teachers informed about potential changes like GT before they are expected to implement such changes in schools. Teachers need to be advised and consulted about possible changes to the roles they currently play and attitudes they hold. The aims, objectives, rationale and structure of the proposed change should also be explained and discussed if successful change is to occur.

The failure of teachers to develop GT on a continuing basis was due to an inability on the part of administrators to provide a structure within which teachers could operate. In the PNG system, an authoritarian decision to implement GT, followed up by planned and supported grass roots discussion and in-service training could have been successful. Such a move would have provided teachers with appropriate psychological support conducive to acceptance of the change. Because such participation did not occur, teachers were faced with a change which was radically new and different to anything they had ever experienced before.

Most teachers involved with GT were secondary trained teachers trained in two or three subjects. These subjects are usually presented in training and later taught in schools as separate and discrete subject disciplines, with little or no attention normally given to interrelationships between these subjects. Thus, teachers are trained to be disciplinary rather than interdisciplinary. For teachers to teach in the manner implied by GT, a completely new philosophy towards education, and new attitudes towards teaching, would be required. Another glance through the personal and professional characteristics of teachers (see Chapters 3.1 and 4.2) will reaffirm that such a dramatic change by largely young and inexperienced teachers required more than they were able to give.

Teachers followed the conventions required by Secondary Circular Letter 1/76, but were not able to provide the substance of the change. What some teachers called 'Generalist Teaching' was, in this writer's opinion, no different to specialist subject teaching. What teachers said they did, and what they actually did do, were often two entirely different things, because few teachers actually understood what GT required of them. Thus, the majority of teachers opted for the style of teaching they felt most secure with, while still operating within the organisational boundaries and requirements set for GT by the Department of Education. Teachers maintained they were teaching 'Generalist Teaching' when, in fact, they were fulfilling only the organisational requirement of the programme without developing a a corresponding classroom approach. Token gestures were made to fulfil the curriculum requirements of GT by linking subjects, but results from the study indicate that the concept of GT was far too sophisticated for the environment in which it was to be used, and much of what purported to be change, was change in name only.

Teachers have ultimate control over the success of a classroom change. They can subvert it or accept and implement the change. In the case of GT, teachers did not deliberately plot to subvert the programme. Many genuine attempts were made to implement GT in the way Secondary Circular Letter 1/76 directed, and, given the circumstances under which teachers were operating, they seemed to cope remarkably well. Rather, if subversion did occur, it can be traced to headquarters failing to provide appropriate support for teachers.

This study concentrated on two main groups of participants relevant to the implementation of GT - administrators and teachers. These two groups need to be mutually supportive, for no matter how important or well planned a classroom change might be, if the behaviour of the change initiators and administrators does not meet the expectations, needs or abilities of teachers, the success of the change is likely to be jeopardised. The headquarters attitude to GT implied that teachers not only had to be the initiators of the type of change they preferred, but that they also be the change agents as well, thus requiring teachers to delineate the targets or goals of the change as well as the procedures and materials necessary to achieve those goals. Prior to the introduction of GT, teachers relied very heavily on specialist subject syllabuses which were prescriptive in the definition of subject aims, objectives and content. GT was a radical departure from such prescription, and teachers were given the freedom to experiment, to devise their own aims, objectives, teaching methods and content. Such responsibility caused problems because it only showed young, generally inexperienced teachers more things they could not do, thus magnifying their feelings of insecurity, confusion and bewilderment.

The Strategy

Change strategies range from cataclysmic and radical to that of persuasive and gradual (Beevers 1968). To identify one single strategy for change as being better than any other strategy is a futile exercise, because the strategy utilised will depend very much on the situation at hand. However, writers tend to suggest that whatever the situation, rapid change based on power-coercive strategies are most suitable for developing countries (Beevers 1968). Therefore, while persuasive changes are often advocated in developed countries, rapid change is seen to have a place in developing countries (Beeby 1967; Mckinnon 1972). GT was a power-coercive change, but it effected little change in the curriculum or in teachers' attitudes or roles.

The introduction of GT to schools was an example of rapid and autocratic change. Little information was provided about GT before teachers were required to implement it, and teachers and administrators were not co-operatively involved in planning for that particular change. The strategy used to plan and implement GT had serious gaps. Results revealed that right from the conception of the idea, there was no serious attempt to devise a strategy appropriate to the nature of the change or suitable for the system and the teachers required to practice GT. The difference between the planning and implementation of GT was a very real one.

The strategy used to implement GT merely served to reinforce the gap between change planners and implementors. The decision to introduce GT was taken at a level other than that at which it was to be implemented, and decision makers seemed to be unaware or ignorant of the capabilities of teachers to implement such a change. Headquarters administrators can be charged with neglect for failing to devise a workable strategy based on actual conditions, rather than conditions they thought existed. Similarly, as well as failing to consider field conditions, change initiators also neglected to consult with other sections at headquarters and with teacher training institutions. These groups should have been involved in planning and preparing for the change by providing a variety of teacher support services.

Where authoritarian 'top-down' strategies are employed to plan and implement a change, teachers are not likely to acquire a thorough familiarity with, or understanding of the change, so a well-structured and closely defined strategy is vital to ensure successful implementation of a change. Many teachers in PNG do not have a sufficiently wide array of techniques or experience to be able to work from a general plan, so clearly defined policy statements and directions should be part of any change strategy. The end result of the decision by headquarters personnel to leave the initiative to schools to develop their own policy and aims for GT was, therefore, not altogether unpredictable.

5.3 The End of GT

By 1979, GT had almost ceased to exist. Informal interviews with Secondary Division and Curriculum Unit headquarters personnel indicated that GT by 1979 was virtually non-existent, except in a few schools where a form of GT is apparently still being practised. GT was phased out largely of its own accord, however by the latter part of 1977 recommendations were already being made for its cessation. The Departmental report of the 'Committee of Enquiry into Standards of High School Students Entering Colleges' recommended that 'Generalist Teaching be phased out as soon as practicable' (Roakeina 1977: 6). This recommendation was based on the realisation that

> Goroka graduates have limited education and training and it is unreasonable to expect them to teach a wide range of high school subjects. There is widespread disquiet amongst teachers at the burdens generalist teaching imposes on them (Roakeina 1977: 6).

Although no direct instruction to cease GT appears to have been subsequently made, GT was allowed to fade away.

5.4 Recommendations

Although GT is now an historical fact, there are many important lessons from this study of the policy and practice of GT to guide future Departmental policy-making. After considering the results of this study, a series of recommendations were developed, which are described in the following section.

1. *Proposed changes should be carefully analysed prior to their implementation.*

Ideally, educational change should occur in response to specific and recognisable needs which the system is unable to meet given existing resources or practices. There is little to be gained by bringing about change merely for the sake of change, and, as Hurst (1975: 65) has argued, 'the problem is to choose innovations that will work'. There are seven areas, therefore, which should be given specific attention. First, the change itself should be clearly defined; second, aims and objectives require explicit statement; third, the experiences of other countries which have implemented similar changes need to be considered to help predict potential problem areas; fourth, the intended scale or magnitude of the change requires definition; fifth, the compatability of the change with reference to normative factors needs to be determined; sixth, the change needs to be considered on a cost-benefit basis; and finally, the origins of the change need to be analysed to determine whether vested interests are pushing changes counter-productive to the system as a whole.

If the nature of and rationale for a change are well understood and clearly stated prior to the change being implemented in schools, the chances of the change being successful will be considerably enhanced. The experience of GT has shown that where such factors were not explained or understood, confusion and failure eventuated.

2. *The system should be geared to accept and support change.*

No matter how carefully planned a change may be on paper, if the system as a whole is not designed to support the implementation of the change then its chances for success are minimised. There are six areas requiring consideration here: first, the organisational structure of the system must be capable of coping with the proposed change with minimal disruption; second, the speed of change must be appropriate to the way in which bureaucratic mechanisms work; third, the channels of communication within and between every relevant level of the system must be open and reliable; fourth, support services need to be provided at the appropriate times to personnel operating at different levels of the system; fifth, an adequate amount of finance needs to be made available at all stages of the proposed project; and, finally, decision making needs to be organised and conducted in a way relevant to the system and its personnel. In the case of GT, the system was poorly organised for change, with the result that a variety of barriers and obstacles to successful change were encountered.

3. *Those individuals and groups likely to be affected by a proposed change should be consulted in a variety of ways, and at all stages of planning, preparing for and implementing the change.*

To plan and prepare for change without involving the potential implementors of a change is folly. Similarly, a range of information about the potential implementors of the change is essential. The extent of participation will be determined by two factors: first the level of general education and the nature of the training and experience of both administrators and teachers; and second, the experience of GT has shown that if teachers are not adequately prepared for, equipped, or supported in change, confusion is inevitable. Potential participants in change - whether at the administrative or classroom levels - need to feel that they are at least considered important enough to be kept informed of developments when change is initially anticipated and actually occurring.

4. *The strategy selected to implement a change should be appropriate to the change itself, the capabilities of the system and the people involved.*

The strategy selected to implement a change must take into account each of the three general areas listed above. There is little to be gained by paying careful attention to the procedure for planning change if the means for putting the change into effect is incongruent with the nature, capabilities and needs of the change, system and participants. The strategy for change should also pay particular attention to providing the means for both formative and summative evaluation. Commenting on teachers in developing countries, a South Pacific Commission publication argued that,

> most people need anchors, needed assured, reliable bases from which to operate - not least the teachers in the schools, whose confidence in their own education and training is limited, whose faith in finding their own solution to curricular and other problems is not strong (South Pacific Commission 1971: 3).

Thus, the strategy for changes must encompass and include each of the factors discussed above in such a way that they work together as a well integrated system which will serve to support rather than destroy change.

Much of the failure of GT can be attributed to the neglect of the four areas discussed above. These four areas also provide considerable scope for further research on other aspects of curriculum change. No follow-up research is possible for GT in these areas, because as a programme, GT no longer exists. However, a useful study might consider the success of past and future curriculum changes with particular reference to these factors and the extent to which they affect the planning and implementation of change in education.

5.5 Conclusion

The outcome of a proposed change will only be as good as the quality of the change itself, the system into which it is introduced, the participants, and the strategy used to implement it. The way in which a change is administered must be limited by practical considerations, particularly in developing countries where the type and quantity of material and human resources are variable. If such practical considerations and potential constraints are accounted for prior to the implementation of a proposed change, then problem areas can be anticipated and appropriate measures taken to counter them. Careful attention to these details in the initial planning stages for change will help promote successful change.

Whatever descriptive category a proposed change may fall into, any change is essentially 'people change'. For many individuals, change is perceived as a threat to established and secure attitudes, roles and ways of teaching, and therefore, there is the ever-present possibility that change might be resisted in some way. Such resistance might be justified or might be based on ignorance and misunderstanding, particularly if people and institutions have been poorly prepared for the change. In such a situation, the change may appear to be adopted, but only at a very superficial level, without the essence of the change being internalised by those concerned. Where 'resistance' to change, in any form, is experienced, the resistance is often a sympton of deeper problems. This was the case with GT. Individuals at all levels of the system (from the Curriculum Unit to Regional Secondary Inspectors and teachers) were poorly prepared for GT. The result was that the form of GT was recognisable but the substance was not. The failure of schools to meet the unwritten requirements of GT in a substantive sense, reflected the failure of Department of Education in the mid-70's to provide any real guidance and information about the essence of GT.

Regardless of the origin of a change like GT, it is the teachers who must implement it. Even though many pressures in developing countries may force centralised decision making, once the decision to promote change has been made, the next challenge lies in convincing teachers of the necessity for change and instructing them in their new roles and procedures concomitant with the change. Such action by administrators is vital, for teachers can be instrumental either in wholling accepting and practising the change, or if they desire, of subverting it.

Experience has shown that attitudes cannot successfully be changed by fiat. Attitudinal and role change demand that participants understand the rationale for and principles behind the change. Decree by administrators that change will occur does not necessarily mean that teachers will successfully adopt the programme. Discussion in previous chapters indicated that as a style of teaching and learning, ideas such as GT have little immediate future in PNG. The concept of GT was difficult enough to define in theoretical terms, without the added complication of generally inexperienced teachers, trained in specialist areas, attempting to give a poorly understood concept practical expression in the classroom. In light of these considerations, GT should not have been introduced to schools in the first place. However, the mistakes of the past need not be repeated in the future, and this report will have been useful if it helps in the learning of that lesson.

Appendix A

SECONDARY CIRCULAR LETTER 15/74

This is a copy of the original document. Photocopies made of the original were not of sufficiently good quality for reproduction here.

PAPUA NEW GUINEA

Secondary Division
Dept. of Education
Konedobu
23rd July, 1974
File No. 55-14-1

TO: All High Schools
District Superintendent
Regional Secondary Inspectors

SECONDARY CIRCULAR LETTER NO. 15/74 A15 M14

CURRICULUM CHANGES - STAGE 1 1975

A number of queries have been raised about the trend Secondary Curriculum will take in 1975. Until we know definitely the outcome of the 5-Year Plan Proposals, there should not be any major changes at this stage. However, the following 3 points are proposed as a start for possible curriculum changes later:

1. Schools, should be encouraged to experiment with generalist teacher programmes in stage 1 in 1975 or immediately when time-tables have to be changed. A generalist teacher in Stage 1 (Forms 1 and 2) would teach the same class for about 25 lessons a week;
2. Community involvement and self-reliance should also be re-emphasized;
3. The practical nature of the Stage 1 Course should be re-emphasized.

An official Gazette Notice will appear in future which will incorporate the above three points. Some brief comments are given here on each of these major points:

A. Generalist Teacher - Some possible advantages:
    1. Provides smooth transition for primary students;
    2. Enables teachers to know their students much better as they will have fewer students for a longer period.
    3. Suggests (because of 2) a more valid assessment of students' performance could be made.
    4. Encourages teachers to be more professional in combining subjects; this requires greater 'research' and preparation than a single subject strand;

5. Develops broader outlook in teachers and as with 4, provides scope for initiative;
6. Makes the school programme more realistic and practical;
7. Allows greater flexibility in administration whereby class activities can be more easily organized out of the classroom;
8. Gives greater confidence to students who can associate themselves with a class group and a particular teacher rather than be lost in a large school community; and
9. Provides economic gains if carried to logical end in that fewer teachers will be required.

B. Community Involvement - The following points are suggested for your consideration:

1. High Schools should have a Board of Governors sub-committee to assist with community activities keeping in mind district goals in this field;
2. High Schools could produce a local paper in pidgin/Motu (etc) so that students and others can inform local people what the school is trying to do in community activities;
3. High schools could prepare contributions for District Superintendents' Newsletters so local Primary Schools are aware of these activities;
4. High Schools should undertake community work that the community wants them to undertake not just what the schools want to undertake.

C. The Practical Nature of Stage 1

You are referred to the Headmasters' Conference Report of September 1969 and the March Education Gazette of 1969 for more information on the practical nature of the Stage 1 Course. If headmasters use the following period loadings in traditional subjects - English 8, Mathematics 5, Science 5, and Social Science 5, as a maximum for 1975, then more activities in RS and B.P., Practical Skills, Home Economics, and Expressive Arts in the remaining 16 lessons (remembering that 1 lesson is allocated to R.I.).

To make the work practical, more integration of subjects under a generalist teacher will be needed. Remember that a practical project will often involve periods from the four (4) 'academic' subjects as well. Generalist teaching assists this integration.

J.F. JONES
Assistant Director - Secondary
for: Director of Education

Appendix B

SECONDARY CIRCULAR LETTER 1/76

This is a copy of the original document. Photocopies made of the original were not of sufficiently good quality for reproduction here.

PAPUA NEW GUINEA

Department of Education
Secondary Division
Konedobu

29th December, 1975

File: EC2-1-1

To: All High Schools
Provincial Superintendents
Regional Secondary Inspectors

SECONDARY CIRCULAR LETTER 1/76 A1 M1

Subject: Generalist Teaching Stage 1

1. In 1975 majority of PNG High Schools implemented a programme of Generalist teaching, as suggested in SCL No. 15/74. Overall this was successful with a number of schools developing programmes that benefited their students.

2. The October 1975 meeting of the Board of Secondary School Studies recommended to the Director of Education that Generalist Teaching should be implemented in all schools in 1976. This was by Director approved.

a) All PNG Secondary Schools in 1976 should implement a form of Generalist teaching in Form 1, and where possible, in Form 2. Generalist teaching should involve one teacher to teach at least three subjects, comprising approximately half the total Form 1 period loading, to the one class.

b) The subject combinations should be flexible and be decided by individual schools according to the availability of staff.

c) Where possible, an experienced member of staff should be appointed to co-ordinate the Generalist teaching programme.

d) Schools should attempt to develop their own integrated curriculum for forms with Generalist teaching.

3. Regional Secondary Inspectors should be consulted regarding the formulation of suitable programmes and timetable. Additional information and teaching materials are available from a number of schools who have already developed programmes in 1975. Details of these programmes and addresses of the schools concerned can be obtained through your Regional Secondary Inspector.

4. It is in the interests of National Secondary Education that all school will implement this important programme in a positive and professional manner.

MALI VOI
Assistant Director - Secondary
for: Director of Education.

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